

MDX-40

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model



Model Name Using Similar Mechanism	MDX-400
Tape Transport Mechanism Type	KMS-151A

SPECIFICATIONS

System	Mini disc digital audio system	Mass	Approx. 1.8kg
Frequency response	20 – 20,000 Hz	Power requirement	12V DC car battery (negative ground)
Wow and flutter	Below measurable limit	Supplied accessories	Disc magazine (1) Mounting hardware (1 set) Bus (Unilink) cable (1) RCA pin cord (1)
Signal-to-noise ratio	90 dB		
Outputs	Bus (Unilink) control output (8 PIN) Analog audio output (RCA PIN)		
Current drain	800 mA (MD playback) 800 mA (during loading or ejecting a disc)		
Dimensions	Approx. 190 × 63.5 × 180 mm (w/h/d) not incl. projecting parts and controls		

- Design and specifications subject to change without notice.

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MINIDISC CHANGER
SONY®

Features

- Sony Bus (Unilink) system compatible mobile MD changer.
- Compact and space-saving design for horizontal installation.
- 8 fs digital filter for high quality sound.
- 1 bit D/A converter.



CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.


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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

Listening to MiniDisc Play

Check the type of the currently used main unit.

Main Unit with MiniDisc Button (except MDX-U1, MDX-100, MDX-400RDS)

Press the MD button on the main unit. MD play starts.

Even if the main unit has the custom file function, you cannot put titles onto MDs.

Main Unit without MiniDisc Button or unit MDX-U1, MDX-100, MDX-400RDS

Press the CD button on the main unit. "CD" is displayed by the main unit, and MD play starts.

Since the unit is operated in the same way as when playing CDs, refer to "Listening to CD Play" in the Operating Instructions manual of the main unit for details.

The MiniDisc players MDX-U1 and MDX-100 have an MD button, but the MDX-40 is operated with the CD button.

When using a main unit with custom file function, or the unit MDX-U1 or MDX-100 together with a CD changer which has the custom file function

In this case, putting titles onto MDs is possible. After entering the name edit mode, the first eight characters of the disc title stored on the MD will be displayed, and you can change them as desired. Having registered the new disc title, it is also possible to change the settings of the bank function and the DSP custom file function.

Notes

- Since the new disc title is stored in the memory of the CD changer with custom file function, the title registered on the MD will not change.
- If the contents of the MD is changed by adding tracks etc., the customized title will become invalid.

Playing in Other Modes

The MDs can be played in all modes available on the currently used main unit, such as intro scan function, repeat function, shuffle function etc. For details, refer to "Playing in Other Modes" in the Operations Instructions manual of the main unit.

Even when using the MDX-U1, MDX-100, or MDX-400RDS, or a main unit with custom file function but without MD button, all functions can be enjoyed in the same way as if a CD changer were connected.

Notes on MiniDiscs

Since a MiniDisc itself is housed in a cartridge, free from accidental contact with your fingers and dust etc., it can withstand a certain degree of rough handling. However, dirt or dust on the surface of the cartridge or a warped cartridge may cause a malfunction of the unit. To enjoy optimum sound quality, observe the following.

Never touch the surface of the MiniDisc itself by deliberately opening the shutter on the cartridge

Do not expose the MiniDisc to direct sunlight or heat sources such as hot air-ducts. Do not leave it in a car parked in the direct sunlight where there can be a considerable rise in temperature. Make sure that it is not left on a dashboard or a rear tray of a car etc. where the temperature can also be excessive.

Cleaning

Wipe the surface of the MiniDisc cartridge from time to time with a soft dry cloth.

Moisture condensation

On a rainy day or in a very damp area, moisture may condense on the lenses inside the unit. Should this occur, the unit will not operate properly. In this case, remove the MiniDisc and wait for about an hour until the moisture evaporates.

This section is extracted from instruction manual.

Preparations

1

• The discs will be played in the order shown.

To remove the discs
Pull into the reverse direction.

Notes

- To avoid malfunction, do not apply excessive force onto the disc magazine, and do not touch its interior.
- Do not insert MiniDiscs with the label facing downwards.
- Before inserting MiniDiscs into the magazine, make sure their shutters are closed.

2

Note
When the front panel is open, do not place items on it or do not apply strong force onto it.

3

To remove the disc magazine

Insert the disc magazine.

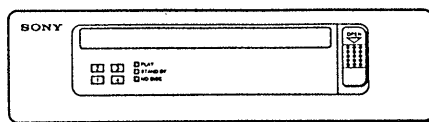
To change only one MiniDisc
Press the EJECT button. When the magazine has been ejected, you can replace the disc which is in location "1" of the magazine.

4

Close the front panel.
Play does not start with the front panel open.

Disc Indicators

By displaying numbers in two different colors, the disc indicator shows the state of the MDs.



Disc Indicator	State of discs
Green number	The MD in the indicated magazine compartment is being played.
Amber numbers	The indicated magazine compartments contain MDs.

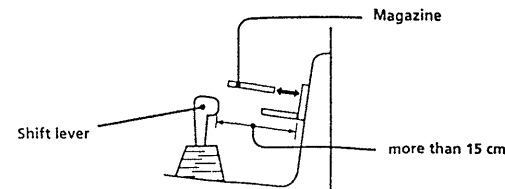
- After inserting the disc magazine, it takes some time till all discs are loaded and the indicator lights up correctly.
- If a number does not light up, there is no MD in the corresponding magazine compartment.

Precautions

- Avoid installing the unit in a place :
 - subject to temperatures exceeding 55 °C (such as in a car parked in direct sunlight).
 - subject to direct sunlight.
 - near heat sources (such as heaters)
 - exposed to rain or moisture.
 - exposed to excessive dust or dirt.
 - subject to excessive vibration.
- Choose the mounting location carefully, observing the following :
 - The fuel tank should not be damaged by the tapping screws.
 - There should be no wire harnesses or pipes under the place where you are going to install the unit.
 - The spare tire, tools or other equipment in or under the trunk should not be interfered with or damaged by the screws or the unit itself.
- To be able to easily insert and eject the magazine, there must be a distance of at least 15 cm between the magazine slot of the unit and the shift lever. Choose the installation location so that the unit does not interfere with gear shifting or other driving operations.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

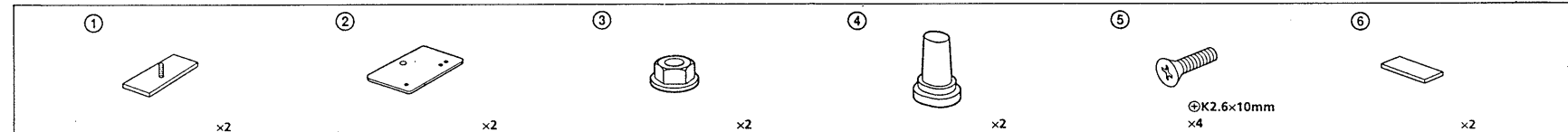
Install the main unit at an angle between - 20 ° and 30 °.



Installation

Supplied Mounting Hardware

The numbers in the list are keyed to those in the instructions.



How to Install the Unit under the Seat

When using the double-sided adhesive tapes

1

Brown paper

Tear off the brown paper, and attach the double-sided adhesive tape to the bottom of the MD changer.

2

Attach the changer to the carpet.

When using the floor mounting brackets

1

Remove the factory-installed screws, and install ① with ②.

2

Place the changer onto ①, and after deciding the installing position, stick ① to the floor.

3

Remove the MD changer.

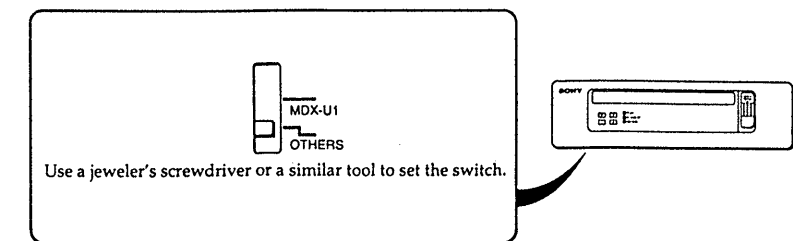
4

5

Setting the MDX-U1/OTHERS Switch

When using the MDX-U1/400RDS models as main unit :
Make sure to set the MDX-U1/OTHERS switch on the bottom of the changer to the MDX-U1 position. Failure to do so will result in changer malfunction.

When using other models than MDX-U1/400RDS as main unit :
Make sure to set the MDX-U1/OTHERS switch on the bottom of the changer to the OTHERS position.



Installation

Mounting the Indash Unit in a Japanese Car

You may not be able to install this unit in some Japanese car models. In such a case, consult your nearest Sony dealer.

Before installing the unit, remove its cover.

1 Remove the rear cover.

2 Remove the cover from the unit.

3 Remove the brackets from the unit.

4 TOYOTA

NISSAN

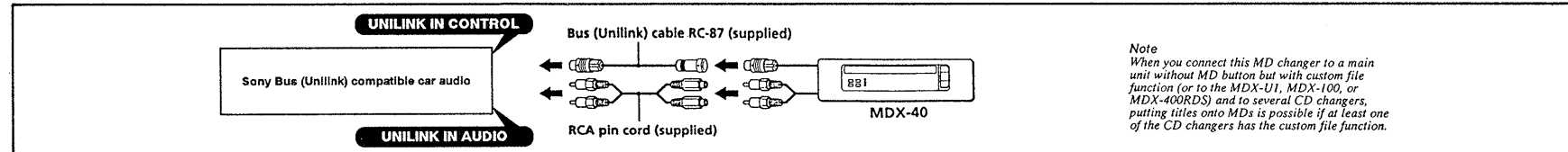
Note
If the unit is installed in the lower deck and interferes with gear shifting, install it in the upper deck.

Mounting the Indash Unit into a Non- Japanese Car

Use the separately available Mounting Kit GMD-340.

Connections

The MD changer is connected in the same way as a CD changer. For details, refer to the respective Installation/Connections manuals.



Connection Diagram

Example 1

Example 2

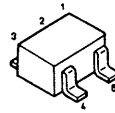
Note
When using the MDX-40 together with the XDP-US0D, connect the BUS (Unlink) cable from the MDX-40 to UNLINK IN CONTROL 1 on the XDP-US0D. Do not connect to UNLINK IN CONTROL 2. Failure to do so may result in distorted sound.

Note
Connecting to several CD changers requires the separately available source selector XA-U20 or XA-U40.

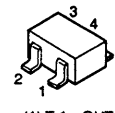
SECTION 2 DIAGRAMS

• SEMICONDUCTOR LEAD LAYOUTS

TC4S66F

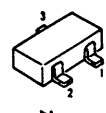


XN1A312-TX



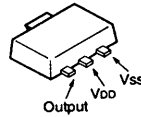
(1) Tr1 OUT
(2) Tr2 OUT
(3) Tr2 IN
(4) GND
(5) Tr1 IN

RB411D

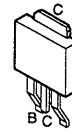


NC
1
2 3

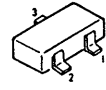
S-8054HN-C8



2SB1203FAS

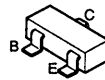


DAP202K

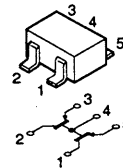


1
2 3

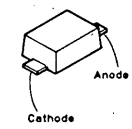
DTC144EK
DTC314TKH04
DTD113EK
2SC1623-L5L6



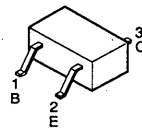
FMY1



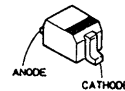
MA8091-M
MA8110-L-TX



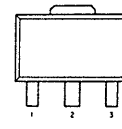
UN5113
UN5211



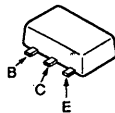
DTZ5.6B
MA8062-M
1SS352



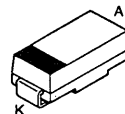
RB110C



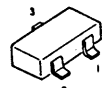
2SB1115A
2SD1622-S
2SD1760F5-R



EC10DS2



DAN202K



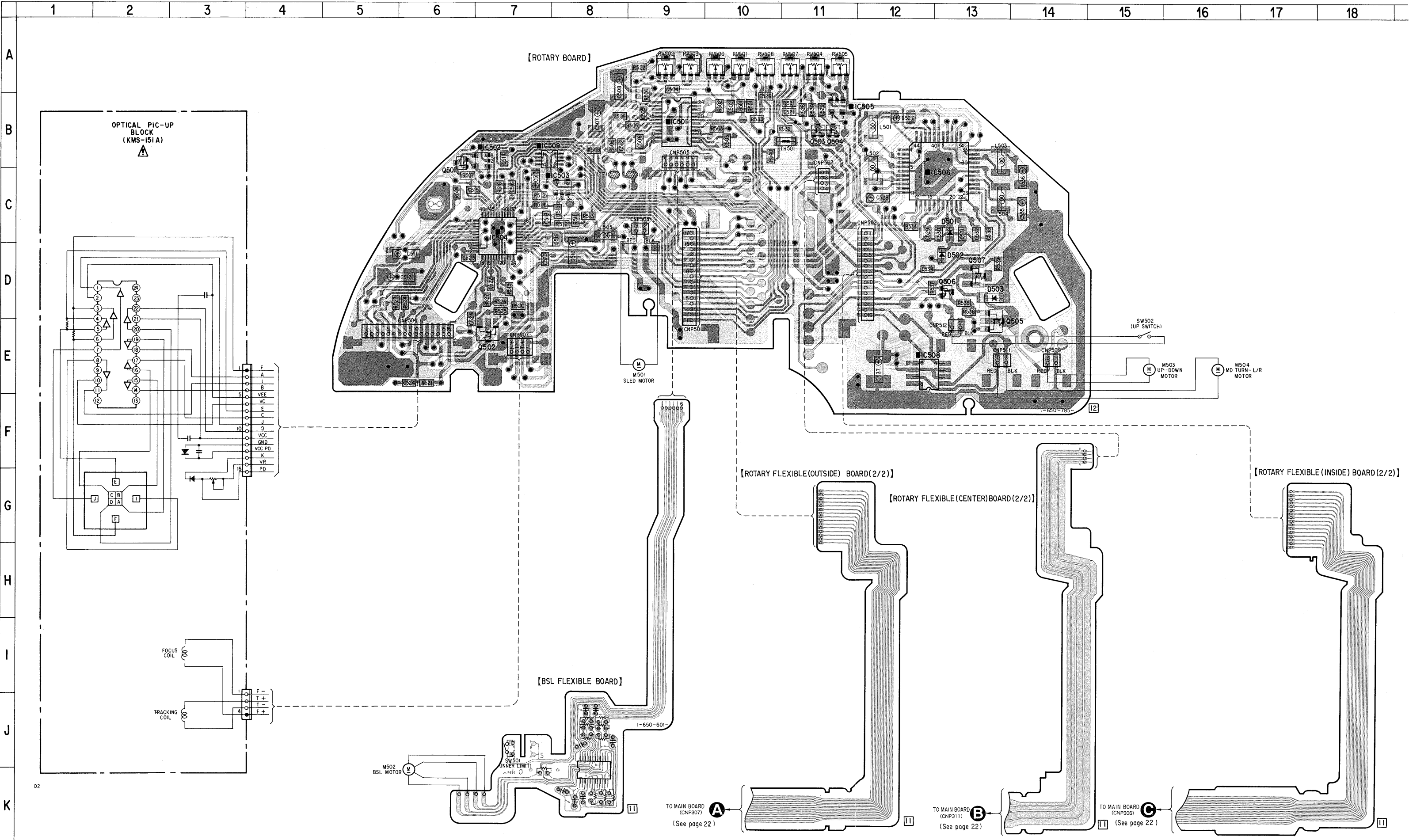
1
2 3

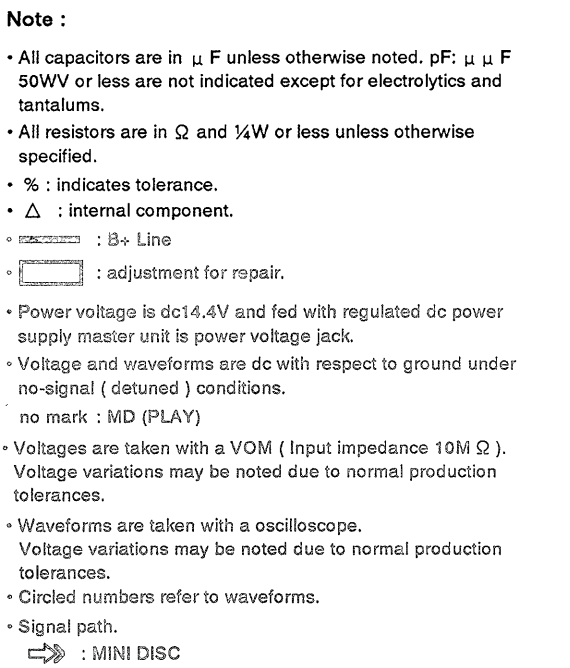
● SEMICONDUCTOR LOCATION

Ref. No.	Location
D501	C - 13
D502	D - 13
D503	D - 13
IC501	B - 9
IC502	B - 7
IC503	C - 8
IC504	C - 7
IC505	B - 11
IC506	C - 13
IC508	E - 12
IC509	B - 7
Q501	B - 6
Q502	E - 7
Q503	B - 11
Q504	B - 11
Q505	D - 13
Q506	D - 13
Q507	D - 13

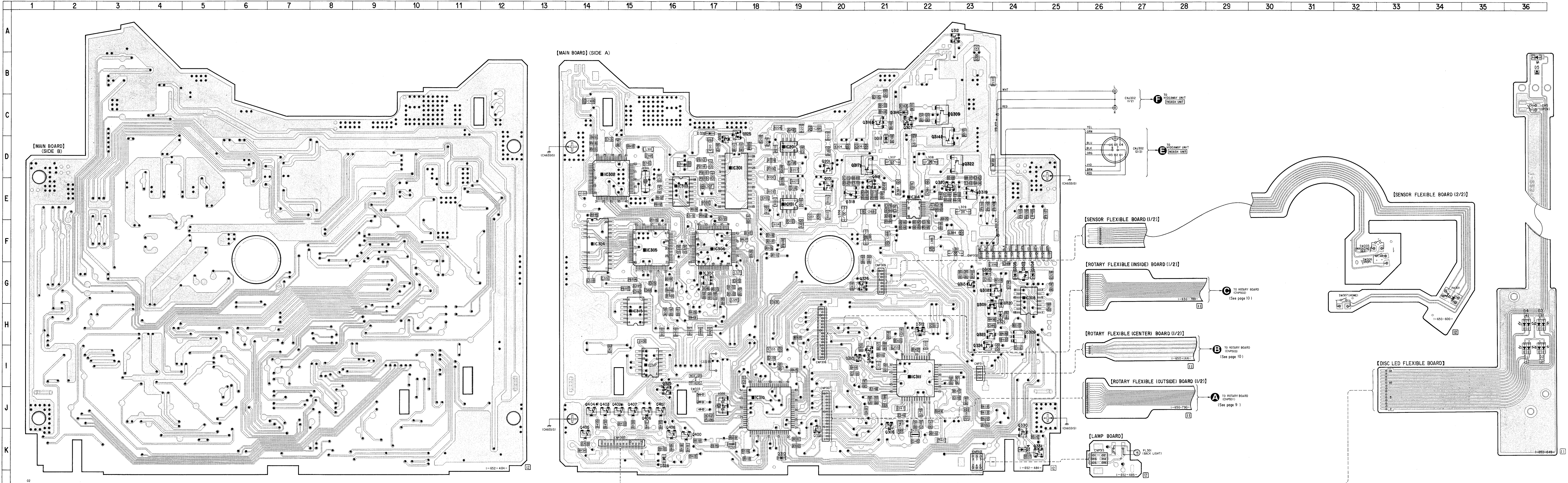
Note:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : Through hole.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.
- : Chip components extracted from the rear side.





2-4. PRINTED WIRING BOARDS – MAIN SECTION – ● Refer to page 7 for Semiconductor Lead Layouts.



● SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D1	I - 36	IC317	I - 15
D2	I - 36		
D3	H - 36		
D4	H - 36	PH301	G - 34
D5	B - 36		
D303	G - 24	Q101	E - 20
D304	G - 24	Q201	D - 20
D305	G - 24	Q301	D - 17
D308	G - 23	Q302	G - 24
D309	H - 23	Q304	I - 21
D310	K - 19	Q305	I - 20
D312	H - 22	Q306	J - 21
D314	C - 21	Q307	C - 22
D317	D - 21	Q309	C - 22
D318	E - 20	Q312	A - 23
D319	E - 23	Q314	D - 22
D320	G - 24	Q315	G - 23
D321	H - 24	Q316	C - 21
D324	K - 24	Q317	D - 21
D325	C - 18	Q318	E - 21
D326	K - 16	Q320	E - 23
D327	H - 25	Q322	D - 23
		Q323	H - 23
		Q324	H - 23
		Q325	J - 16
IC101	E - 19		
IC201	D - 19		
IC301	E - 17	Q326	G - 20
IC302	E - 15	Q330	K - 24
IC303	E - 16	Q331	K - 25
		Q332	K - 19
IC304	F - 14	Q400	K - 16
IC305	F - 15		
IC306	F - 17	Q401	J - 16
IC307	G - 17	Q402	J - 15
IC308	G - 24	Q403	J - 14
		Q404	J - 14
		Q405	K - 14
IC309	H - 24		
IC310	J - 18		
IC311	I - 22	Q408	J - 15
IC314	E - 22	Q407	J - 15
IC315	H - 15	Q408	K - 16

Note:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : Through hole.
- ▨ : Pattern of the rear side.
- ▨ : Pattern from the side which enables seeing. (The other layers' patterns are not indicated)

Caution :



Pattern face side : Parts on the pattern face side seen from (Conductor Side) the pattern face are indicated.


Parts face side : Parts on the parts face side seen from the (Component side) parts face are indicated.

SECTION 3
EXPLODED VIEWS

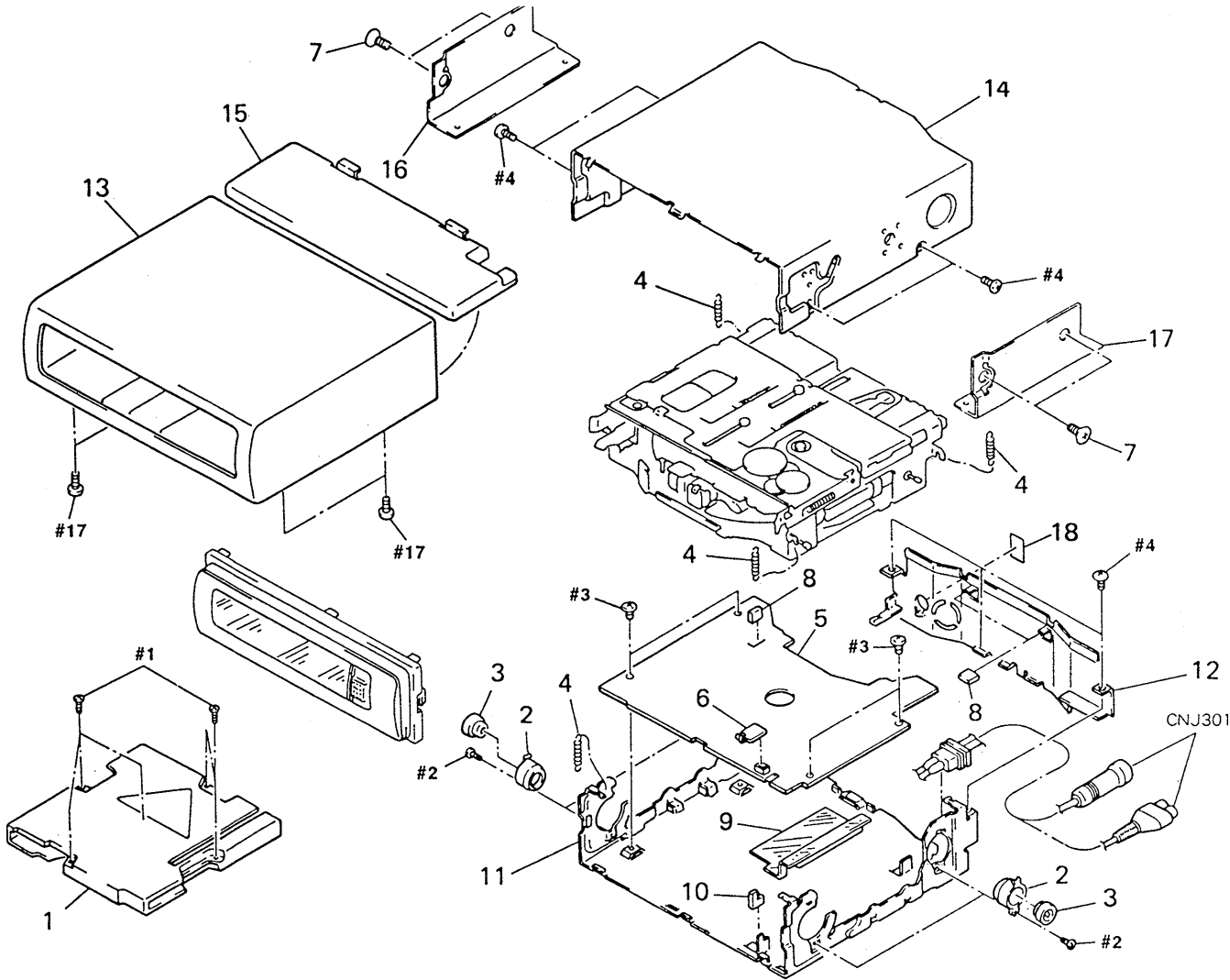
NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

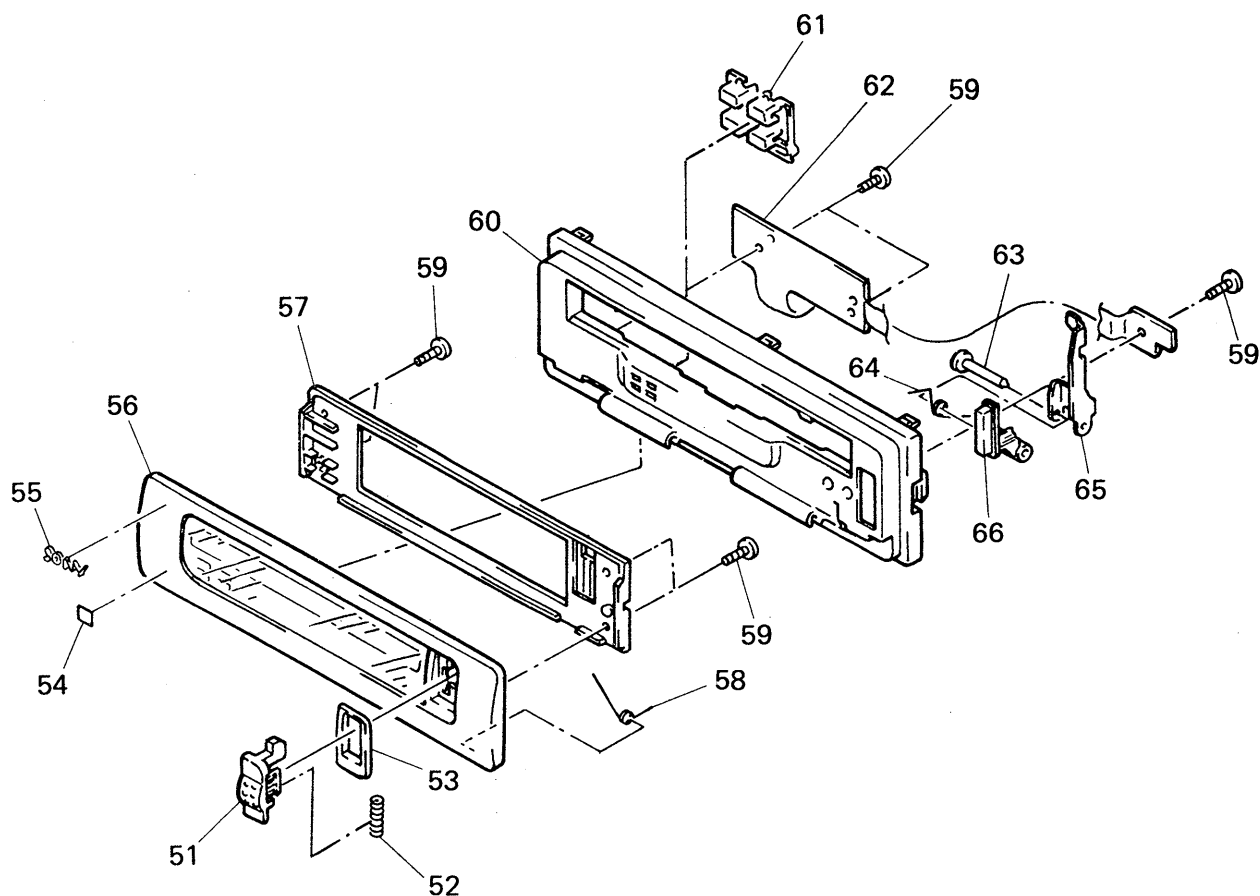
3-1. HIDEAWAY SECTION



Ref.No.	Part No.	Description	Remark
1	X-3367-581-1	MAGAZINE ASSY	
2	3-907-892-03	HOLDER (DAMPER)	
3	3-907-915-01	DAMPER (MC)	
4	3-907-914-01	SPRING (FL), TENSION	
* 5	A-3222-775-A	MAIN BOARD, COMPLETE	
* 6	1-652-485-11	LAMP BOARD	
7	3-367-968-01	SCREW (M5×8)	
8	3-907-918-01	CUSHION (STTOPPER B)	
* 9	3-909-606-01	SHEET (FLEXIBLE)	
10	3-907-917-01	CUSHION (STTOPPER A)	

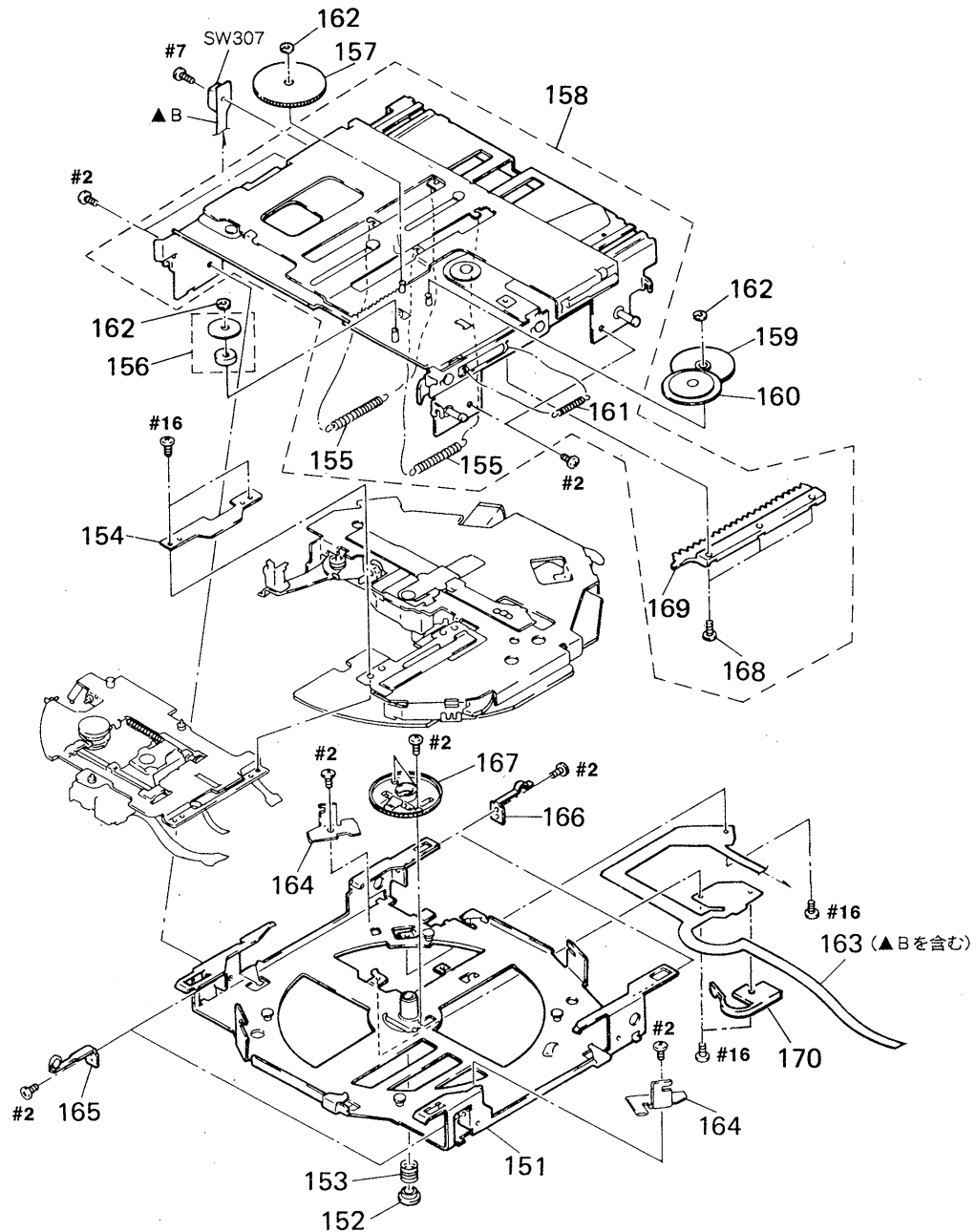
Ref.No.	Part No.	Description	Remark
* 11	3-907-888-11	CHASSIS (MAIN)	
* 12	3-907-891-11	CHASSIS (REAR)	
13	3-913-794-11	COVER (MAIN)	
14	3-913-795-11	COVER (REAR)	
* 15	X-3368-774-1	COVER (ZN) ASSY	
* 16	3-913-807-01	BRACKET (L)	
* 17	3-913-808-01	BRACKET (R)	
* 18	3-915-667-01	SHEET (ZN)	
CNJ301	1-765-422-11	CORD (WITH CONNECTOR) (UNI LINK/AUDIO)	

3-2. FRONT PANEL SECTION



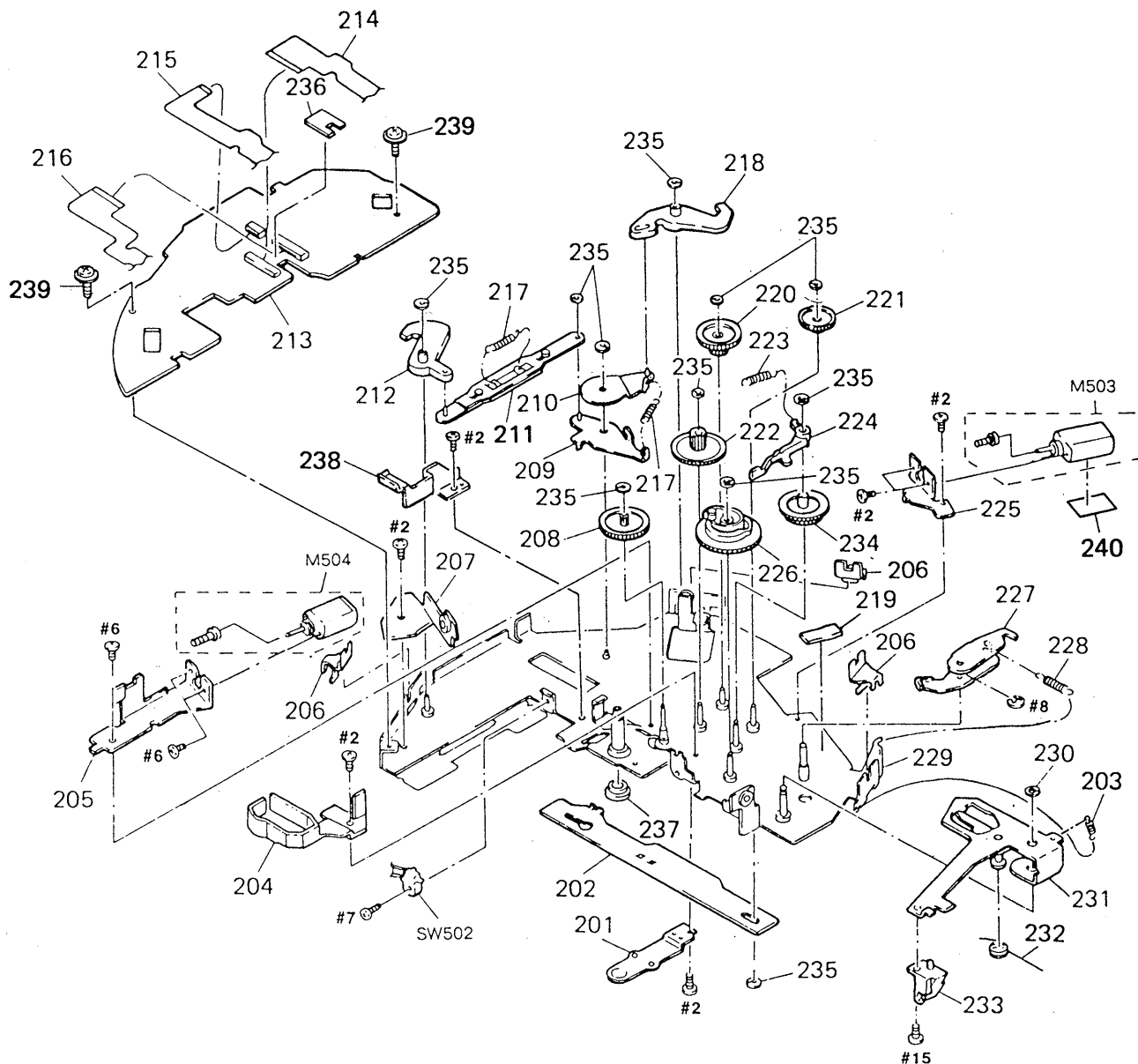
Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
51	3-913-804-01	BUTTON (OPEN)		59	4-908-792-31	SCREW (B2) (M2X4), TAPPING	
52	3-913-805-01	SPRING (OPEN), COMPRESSION		60	3-913-810-11	PANEL (SUB)	
53	3-913-809-01	PANEL (OPEN BUTTON)		61	3-913-799-01	PLATE, LIGHT GUIDE	
54	3-908-254-01	EMBLEM, MD		62	1-652-649-11	PC BOARD, DISC-LED FLEXIBLE	
55	3-904-194-01	EMBLEM (NO. 2.5), SONY		* 63	3-913-802-01	SHAFT (EJ)	
56	X-3368-415-1	PANEL (FRONT) ASSY (EXP)		64	3-913-803-01	SPRING (EJ)	
57	3-913-796-01	PANEL (REAR)		* 65	3-913-800-01	LEVER (EJ)	
58	3-913-806-01	SPRING (PANEL)		66	3-913-801-01	BUTTON (EJ)	

3-3. MD SECTION-1



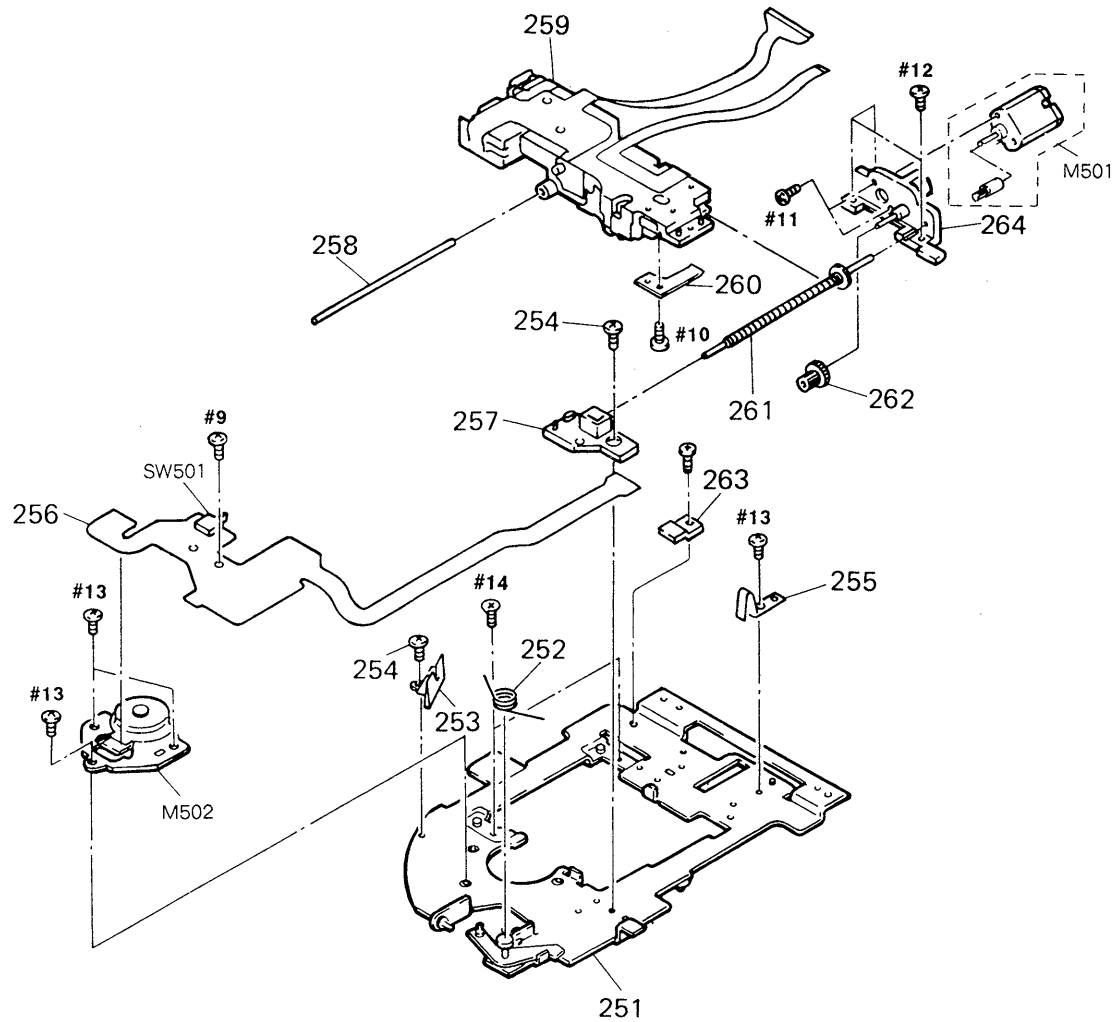
Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
* 151	X-3367-576-1	CHASSIS (BASE) COMPLETE ASSY		162	3-321-483-11	RING, RETAINING	
152	3-909-430-01	CAP (CENTER)		163	1-650-600-11	PC BOARD, SENSOR FLEXIBLE	
153	3-908-680-01	SPRING (CENTER), COMPRESSION		* 164	3-908-683-01	HOLDER (KC STOPPER)	
* 154	3-909-435-01	RETAINER (HINGE)		165	X-3367-578-1	SPRING, (BF) ASSY	
155	3-908-491-01	SPRING (HM), TENSION		166	3-908-684-01	SPRING (BR)	
156	X-3367-709-1	ROLLER (F) ASSY		167	3-908-681-01	GEAR (FIXED)	
157	3-909-207-01	GEAR (F1)		168	3-719-381-31	SCREW (M2X3)	
* 158	X-3367-579-1	CHASSIS (UPPER) ASSY		169	3-908-490-01	RACK	
159	3-909-208-01	GEAR (F2)		170	3-912-230-01	SPRING (HOME SW)	
160	X-3367-708-1	ARM (F) ASSY		SW307	1-570-771-11	SWITCH (HOME)	
161	3-908-492-01	SPRING (EJU), TENSION					

3-4. MD SECTION-2



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-908-352-01	SPRING (CENTER)		223	3-539-226-11	SPRING, TENSION	
202	X-3367-570-1	JOINT (KC-A) ASSY		224	3-908-339-01	LEVER (SW)	
203	3-500-129-01	SPRING, TENSION		* 225	3-908-348-01	HOLDER (MOTOR B)	
204	3-908-340-01	COVER (FLEXIBLE)		226	X-3367-573-1	GEAR ASSY, CAM	
* 205	3-908-346-01	HOLDER (MOTOR A)		* 227	3-908-344-01	LEVER (STOPPER)	
206	3-908-360-01	PLATE (PHOTO A)		228	3-483-117-01	SPRING, TENSION	
207	X-3367-569-1	HOLDER (ROLLER) ASSY		* 229	X-3367-568-1	CHASSIS (ROTARY) ASSY	
208	3-908-342-01	GEAR (KA2)		230	3-385-409-01	WASHER, POLYETHYLENE	
209	X-3367-571-1	JOINT (KC-B) ASSY		* 231	X-3367-575-1	LEVER (UD-A) ASSY	
210	X-3367-688-1	JOINT (KC-D) ASSY		232	3-908-357-01	SPRING (UD-B)	
211	X-3367-572-1	JOINT (KC-C) ASSY		233	3-908-358-01	LEVER (UD-C)	
212	3-908-335-01	LEVER (KC-H-A)		234	3-908-337-01	GEAR (KB)	
* 213	A-3298-179-A	MOUNTED PCB, ROTARY BOARD, COMPLETE		235	3-377-719-11	WASHER, POLYETHYLENE	
214	1-650-789-11	PC BOARD, ROTARY FLEXIBLE		236	3-911-213-01	SHEET (FLEXIBLE A)	
215	1-651-144-11	PC BOARD, ROTARY FLEXIBLE		237	3-909-431-01	COLLAR (CENTER)	
216	1-650-790-11	PC BOARD, ROTARY FLEXIBLE		238	3-914-238-01	HOLDER (FLEXIBLE)	
217	3-909-437-01	SPRING, TENSION		239	3-701-468-01	SCREW (+ 2x4), LOCK	
218	3-908-336-01	LEVER (KC-H-B)		240	3-915-601-01	SHEET (MOTOR)	
219	3-911-215-02	SHEET (LEAD RETAINER)		M503	X-3367-748-1	U/D MOTOR ASSY (UP/DW)	
220	3-908-343-01	WHEEL (A), WORM		M504	X-3367-747-1	ROTARY MOTOR ASSY (MD TURN L/R)	
221	3-908-338-01	WHEEL (B), WORM		SW502	1-570-771-21	SWITCH (UP/DW)	
222	3-908-341-01	GEAR (KA1)					

3-5. MD SECTION-3



The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
* 251	X-3367-536-1	CHASSIS (OP) ASSY	
252	3-908-495-01	SPRING (OP-UD)	
253	3-908-370-01	PLATE (PHOTO B)	
254	3-909-412-01	SCREW (+P) (1.7X2) (TYPE 3)	
255	3-384-465-01	SPRING (FEED SHAFT)	
256	1-650-601-11	PC BOARD, BSL FLEXIBLE	
257	3-908-371-01	HOLDER (SL SHAFT)	
258	3-908-376-01	SHAFT (KJ)	
Δ 259	8-583-007-11	DEVICE, MINIATURE DISK KMS-151A	

Ref. No.	Part No.	Description	Remark
260	3-384-475-01	SPRING (RACK 3)	
261	X-3367-539-1	SHAFT (SL) ASSY	
262	3-908-373-01	GEAR (SLB)	
* 263	3-909-825-01	HOLDER (KJ)	
264	X-3367-538-1	HOLDER (SL MOTOR) ASSY	
M501	X-3365-845-1	MOTOR ASSY, SL (SLED)	
M502	1-698-304-11	MOTOR, BSL	
SW501	1-572-467-61	PUSH SWITCH (1KEY) (INNER LIMIT)	

SECTION 4 ELECTRICAL PARTS LIST

LAMP

MAIN

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms
METAL : Metal-film resistor
METAL OXIDE : Metal oxide-film resistor
F : nonflammable

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u : μ , for example :
uA.... : μ A...., uPA.... : μ PA....
uPB.... : μ PB...., uPC.... : μ PC....
uPD.... : μ PD....
- CAPACITORS
uF : μ F
- COILS
uH : μ H

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description	Remark			
*	1-652-485-11	LAMP BOARD *****				
		< CONNECTOR >				
CNP313	1-764-377-31	CONNECTOR, BOARD TO BOARD 6P < PILOT LAMP >				
PL301	1-517-181-31	LAMP, PILOT(OPEN LED)				

*	A-3222-775-A	MAIN BOARD, COMPLETE *****				
		< CAPACITOR >				
C101	1-104-518-11	ELECT CHIP	10uF	20%	16V	
C102	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C103	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C104	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C105	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C106	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C201	1-104-518-11	ELECT CHIP	10uF	20%	16V	
C202	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C203	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C204	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C205	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C206	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C303	1-104-518-11	ELECT CHIP	10uF	20%	16V	
C304	1-107-767-21	ELECT CHIP	100uF	0	6.3V	
C305	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C306	1-104-518-11	ELECT CHIP	10uF	20%	16V	
C307	1-135-216-11	TANTALUM CHIP	10uF	20%	10V	
C308	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C309	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C310	1-107-767-21	ELECT CHIP	100uF	0	6.3V	

Ref.No.	Part No.	Description	Remark			
C311	1-135-227-11	TANTAL. CHIP	100uF	20%	6.3V	
C312	1-164-346-11	CERAMIC CHIP	1uF	10%	25V	
C313	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C314	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C315	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C316	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C317	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V	
C318	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C319	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C320	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C321	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C322	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C323	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	
C325	1-163-986-00	CERAMIC CHIP	0.027uF	10%	25V	
C326	1-162-568-11	CERAMIC CHIP	0.33uF	10%	16V	
C327	1-162-568-11	CERAMIC CHIP	0.33uF	10%	16V	
C328	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C329	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	
C330	1-107-778-21	ELECT CHIP	470uF	20%	16V	
C331	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C332	1-125-701-11	CAP, DOUBLE LAYER		0.047F		
C333	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C334	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C335	1-107-767-21	ELECT CHIP	100uF	0	6.3V	
C336	1-163-033-00	CERAMIC CHIP	0.022uF		50V	
C337	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	
C338	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V	
C339	1-135-216-11	TANTALUM CHIP	10uF	20%	10V	
C340	1-162-568-11	CERAMIC CHIP	0.33uF	10%	16V	
C342	1-135-216-11	TANTALUM CHIP	10uF	20%	10V	
C343	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C344	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C345	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C346	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	

Ref. No.	Part No.	Description	Remark
C347	1-162-568-11	CERAMIC CHIP 0.33uF	10% 16V
C348	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C349	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C350	1-163-017-00	CERAMIC CHIP 0.0047uF	5% 50V
C351	1-162-568-11	CERAMIC CHIP 0.33uF	10% 16V
C352	1-162-568-11	CERAMIC CHIP 0.33uF	10% 16V
C353	1-162-568-11	CERAMIC CHIP 0.33uF	10% 16V
C354	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V
C355	1-162-568-11	CERAMIC CHIP 0.33uF	10% 16V
C363	1-163-033-00	CERAMIC CHIP 0.022uF	50V
C366	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C368	1-128-590-21	ELECT CHIP 100uF	20% 6.3V
C369	1-128-590-21	ELECT CHIP 100uF	20% 6.3V
C370	1-162-967-11	CERAMIC CHIP 0.0033uF	10% 50V
C371	1-162-967-11	CERAMIC CHIP 0.0033uF	10% 50V
C372	1-162-959-11	CERAMIC CHIP 330PF	5% 50V
C373	1-104-607-11	ELECT CHIP 47uF	20% 16V
C374	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C375	1-162-959-11	CERAMIC CHIP 330PF	5% 50V
C376	1-164-357-11	CERAMIC CHIP 1000PF	5% 50V
C377	1-164-357-11	CERAMIC CHIP 1000PF	5% 50V
C378	1-162-959-11	CERAMIC CHIP 330PF	5% 50V
C379	1-162-958-11	CERAMIC CHIP 270PF	5% 50V
C380	1-104-607-11	ELECT CHIP 47uF	20% 16V
C381	1-162-959-11	CERAMIC CHIP 330PF	5% 50V
C382	1-162-967-11	CERAMIC CHIP 0.0033uF	10% 50V
C383	1-162-967-11	CERAMIC CHIP 0.0033uF	10% 50V
C384	1-128-590-21	ELECT CHIP 100uF	20% 6.3V
C385	1-135-227-11	TANTAL. CHIP 100uF	20% 6.3V
C386	1-164-346-11	CERAMIC CHIP 1uF	16V
C387	1-104-607-11	ELECT CHIP 47uF	20% 16V
C388	1-164-227-11	CERAMIC CHIP 0.022uF	10% 25V
C389	1-162-953-11	CERAMIC CHIP 100PF	5% 50V
C390	1-135-216-11	TANTALUM CHIP 10uF	20% 10V
C391	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C392	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C396	1-164-299-11	CERAMIC CHIP 0.22uF	10% 25V
C397	1-163-222-11	CERAMIC CHIP 5PF	0.25PF 50V
C401	1-162-953-11	CERAMIC CHIP 100PF	5% 50V
C402	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C403	1-163-033-00	CERAMIC CHIP 0.022uF	50V
C404	1-164-357-11	CERAMIC CHIP 1000PF	5% 50V
C405	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C406	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C407	1-164-357-11	CERAMIC CHIP 0.001uF	5% 50V
C408	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C409	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V

< CONNECTOR >

CN305 1-566-530-11 CONNECTOR, FPC (ZIF) 14P
 CNP302 1-764-585-11 PIN, CONNECTOR (PC BOARD) 12P

Ref. No.	Part No.	Description	Remark
CNP306	1-566-533-11	CONNECTOR, FPC (ZIF) 17P	
CNP307	1-568-238-11	CONNECTOR, FPC (1.0MM) (ZIF) 16P	
CNP309	1-566-524-11	CONNECTOR, FPC (ZIF) 8P	
CNP311	1-580-438-21	CONNECTOR, FPC 4P	
CNP312	1-764-376-31	CONNECTOR, BOARD TO BOARD 6P	
< DIODE >			
D303	8-719-975-40	DIODE RB411D	
D304	8-719-422-64	DIODE MA8062-M	
D305	8-719-422-64	DIODE MA8062-M	
D308	8-719-422-64	DIODE MA8062-M	
D309	8-719-914-44	DIODE DAP202K	
D310	8-719-016-74	DIODE 1SS352	
D312	8-719-914-44	DIODE DAP202K	
D314	8-719-977-03	DIODE DTZ5.6B	
D317	8-719-422-97	DIODE MA8091-M	
D318	8-719-975-33	DIODE RB110C	
D319	8-719-975-33	DIODE RB110C	
D320	8-719-422-64	DIODE MA8062-M	
D321	8-719-016-74	DIODE 1SS352	
D324	8-719-423-21	DIODE MA8110-L-TX	
D325	8-719-914-43	DIODE DAN202K	
D326	8-719-422-64	DIODE MA8062-M	
# D327	8-719-016-74	DIODE 1SS352	
D328	8-719-988-62	DIODE 1SS355	
< FERRITE BEAD >			
FB302	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB304	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB305	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB307	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB309	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB310	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB311	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB312	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB313	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB314	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB315	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB317	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB320	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB321	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB330	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB331	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB332	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB333	1-414-235-11	INDUCTOR, FERRITE BEAD	
< RESISTOR >			
FB319	1-216-295-00	METAL GLAZE 0 5% 1/10W	
< IC >			
IC101	8-759-636-55	IC M5218AFP	
IC201	8-759-636-55	IC M5218AFP	

Note : # D327 is canceled only when IC308 uses MM1284XFFX.

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC301	8-759-197-12	IC AK4318-VS-E1		Q323	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC302	8-752-365-90	IC CXD2531BR		Q324	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC303	8-759-925-90	IC SN74HC74ANS		Q325	8-729-020-67	TRANSISTOR XN1A312-TX	
IC304	8-752-354-52	IC CXK414400TM-12		Q326	8-729-020-67	TRANSISTOR XN1A312-TX	
IC305	8-752-363-57	IC CXD2526AR		Q330	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC306	8-752-352-18	IC CXD2525R		Q331	8-729-020-67	TRANSISTOR XN1A312-TX	
IC307	8-759-234-77	IC TC4S66F		Q332	8-729-015-76	TRANSISTOR UN5211	
IC308	8-759-096-18	IC MM1176XFF		Q400	8-729-904-66	TRANSISTOR DTD113EK	
IC309	8-759-940-45	IC S-8054HN-CB		Q401	8-729-904-66	TRANSISTOR DTD113EK	
IC310	8-759-284-89	IC uPD78056YGC-W15-3B9		Q402	8-729-904-66	TRANSISTOR DTD113EK	
IC311	8-752-062-98	IC CXA1082BQ-T6		Q403	8-729-904-66	TRANSISTOR DTD113EK	
IC314	8-759-990-43	IC TL1451ACDB		Q404	8-729-904-66	TRANSISTOR DTD113EK	
IC315	8-759-925-80	IC SN74HC14ANS		Q405	8-729-904-66	TRANSISTOR DTD113EK	
IC317	8-759-926-24	IC SN74HC164ANS		Q406	8-729-904-66	TRANSISTOR DTD113EK	
< COIL >				Q407	8-729-904-66	TRANSISTOR DTD113EK	
L301	1-410-197-11	INDUCTOR CHIP 2.7uH		Q408	8-729-901-01	TRANSISTOR DTC144EK	
L305	1-403-584-11	COIL, CHIP CHOKE	33uH	< RESISTOR >			
L306	1-403-584-11	COIL, CHIP CHOKE	33uH	R101	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
L307	1-403-584-11	COIL, CHIP CHOKE	33uH	R102	1-216-699-11	METAL CHIP 100K 0.5% 1/10W	
L308	1-403-584-11	COIL, CHIP CHOKE	33uH	R103	1-216-182-00	METAL GLAZE 220 2% 1/8W	
L309	1-403-584-11	COIL, CHIP CHOKE	33uH	R104	1-216-219-00	METAL GLAZE 7.5K 2% 1/8W	
L310	1-403-584-11	COIL, CHIP CHOKE	33uH	R105	1-216-216-00	METAL GLAZE 5.6K 2% 1/8W	
< FILTER >				R106	1-216-216-00	METAL GLAZE 5.6K 2% 1/8W	
NF301	1-239-466-21	FILTER, EMI		R107	1-216-679-11	METAL CHIP 15K 0.5% 1/10W	
< IC LINK >				R108	1-216-230-00	METAL GLAZE 22K 2% 1/8W	
PS301	1-532-686-21	LINK, IC		R109	1-216-230-00	METAL GLAZE 22K 2% 1/8W	
< TRANSISTOR >				R110	1-216-679-11	METAL CHIP 15K 0.5% 1/10W	
Q101	8-729-920-21	TRANSISTOR DTC314TKH04		R201	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q201	8-729-920-21	TRANSISTOR DTC314TKH04		R202	1-216-699-11	METAL CHIP 100K 0.5% 1/10W	
Q301	8-729-403-35	TRANSISTOR UN5113		R203	1-216-182-00	METAL GLAZE 220 2% 1/8W	
Q302	8-729-808-01	TRANSISTOR 2SD1622-S		R204	1-216-219-00	METAL GLAZE 7.5K 2% 1/8W	
Q304	8-729-015-76	TRANSISTOR UN5211		R205	1-216-216-00	METAL GLAZE 5.6K 2% 1/8W	
Q305	8-729-015-76	TRANSISTOR UN5211		R206	1-216-216-00	METAL GLAZE 5.6K 2% 1/8W	
Q306	8-729-015-76	TRANSISTOR UN5211		R207	1-216-679-11	METAL CHIP 15K 0.5% 1/10W	
Q307	8-729-020-67	TRANSISTOR XN1A312-TX		R208	1-216-230-00	METAL GLAZE 22K 2% 1/8W	
Q309	8-729-921-49	TRANSISTOR 2SD1760F5-R		R209	1-216-230-00	METAL GLAZE 22K 2% 1/8W	
Q312	8-729-020-67	TRANSISTOR XN1A312-TX		R210	1-216-679-11	METAL CHIP 15K 0.5% 1/10W	
Q314	8-729-821-62	TRANSISTOR 2SB1203FAS		R302	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q315	8-729-015-76	TRANSISTOR UN5211		R303	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q316	8-729-808-01	TRANSISTOR 2SD1622-S		R304	1-216-017-00	METAL CHIP 47 5% 1/10W	
Q317	8-729-821-62	TRANSISTOR 2SB1203FAS		R305	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q318	8-729-920-53	TRANSISTOR FMY1		R306	1-216-214-00	METAL GLAZE 4.7K 5% 1/8W	
Q320	8-729-920-53	TRANSISTOR FMY1		R307	1-216-001-00	METAL CHIP 10 5% 1/10W	
Q322	8-729-821-62	TRANSISTOR 2SB1203FAS		R308	1-216-001-00	METAL CHIP 10 5% 1/10W	
				R309	1-216-090-00	METAL CHIP 51K 5% 1/10W	
				R310	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
				R311	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	

Ref.No.	Part No.	Description	Remark			Ref.No.	Part No.	Description	Remark		
R312	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	R373	1-216-298-00	METAL CHIP	2. 2	5%	1/10W
R313	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	R377	1-216-073-00	METAL CHIP	10K	5%	1/10W
R314	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	R378	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W
R315	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W	R379	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W
R316	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W	R380	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W
R317	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W	R381	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W
R318	1-216-833-11	METAL CHIP	10K	5%	1/16W	R382	1-216-805-11	METAL CHIP	47	5%	1/16W
R319	1-216-833-11	METAL CHIP	10K	5%	1/16W	R383	1-218-716-11	METAL CHIP	10K	0. 50%	1/16W
R320	1-216-833-11	METAL CHIP	10K	5%	1/16W	R384	1-218-704-11	METAL CHIP	3. 3K	0. 50%	1/16W
R321	1-216-073-00	METAL CHIP	10K	5%	1/10W	R385	1-216-805-11	METAL CHIP	47	5%	1/16W
R322	1-216-061-00	METAL CHIP	3. 3K	5%	1/10W	R386	1-216-822-11	METAL CHIP	1. 2K	5%	1/16W
R323	1-216-073-00	METAL CHIP	10K	5%	1/10W	R387	1-216-822-11	METAL CHIP	1. 2K	5%	1/16W
R324	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R388	1-216-827-11	METAL CHIP	3. 3K	5%	1/16W
R326	1-216-081-00	METAL CHIP	22K	5%	1/10W	R389	1-216-821-11	METAL CHIP	1K	5%	1/16W
R327	1-216-821-11	METAL CHIP	1K	5%	1/16W	R390	1-216-819-11	METAL CHIP	680	5%	1/16W
R328	1-216-073-00	METAL CHIP	10K	5%	1/10W	R391	1-216-835-11	METAL CHIP	15K	5%	1/16W
R329	1-216-817-11	METAL CHIP	470	5%	1/16W	R392	1-216-835-11	METAL CHIP	15K	5%	1/16W
R330	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R393	1-216-830-11	METAL CHIP	5. 6K	5%	1/16W
R331	1-216-037-00	METAL CHIP	330	5%	1/10W	R394	1-216-839-11	METAL CHIP	33K	5%	1/16W
R332	1-216-037-00	METAL CHIP	330	5%	1/10W	R395	1-216-839-11	METAL CHIP	33K	5%	1/16W
R333	1-216-097-00	METAL CHIP	100K	5%	1/10W	R396	1-216-839-11	METAL CHIP	33K	5%	1/16W
R334	1-216-097-00	METAL CHIP	100K	5%	1/10W	R397	1-216-839-11	METAL CHIP	33K	5%	1/16W
R335	1-216-821-11	METAL CHIP	1K	5%	1/16W	R398	1-216-821-11	METAL CHIP	1K	5%	1/16W
R336	1-218-716-11	METAL CHIP	10K	0. 50%	1/16W	R399	1-216-827-11	METAL CHIP	3. 3K	5%	1/16W
R338	1-216-295-91	METAL GLAZE	0	5%	1/10W	R400	1-216-819-11	METAL CHIP	680	5%	1/16W
R339	1-216-073-00	METAL CHIP	10K	5%	1/10W	R401	1-216-805-11	METAL CHIP	47	5%	1/16W
R342	1-216-845-11	METAL CHIP	100K	5%	1/16W	R402	1-216-822-11	METAL CHIP	1. 2K	5%	1/16W
R344	1-216-821-11	METAL CHIP	1K	5%	1/16W	R403	1-216-822-11	METAL CHIP	1. 2K	5%	1/16W
R345	1-216-114-00	METAL GLAZE	510K	5%	1/10W	R404	1-216-805-11	METAL CHIP	47	5%	1/16W
R346	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R405	1-218-716-11	METAL CHIP	10K	0. 50%	1/16W
R347	1-216-097-00	METAL CHIP	100K	5%	1/10W	R406	1-218-704-11	METAL CHIP	3. 3K	0. 50%	1/16W
R348	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W	R407	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R349	1-216-083-00	METAL CHIP	27K	5%	1/10W	R408	1-216-085-00	METAL CHIP	33K	5%	1/10W
R350	1-216-097-00	METAL CHIP	100K	5%	1/10W	R409	1-216-105-00	METAL CHIP	220K	5%	1/10W
R351	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R410	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R352	1-216-097-00	METAL CHIP	100K	5%	1/10W	R413	1-216-097-00	METAL CHIP	100K	5%	1/10W
R353	1-216-081-00	METAL CHIP	22K	5%	1/10W	R414	1-216-073-00	METAL CHIP	10K	5%	1/10W
R354	1-216-097-00	METAL CHIP	100K	5%	1/10W	R415	1-216-033-00	METAL CHIP	220	5%	1/10W
R355	1-216-105-00	METAL CHIP	220K	5%	1/10W	R425	1-216-845-11	METAL CHIP	100K	5%	1/16W
R356	1-216-093-00	METAL CHIP	68K	5%	1/10W	R426	1-216-821-11	METAL CHIP	1K	5%	1/16W
R357	1-216-121-00	METAL CHIP	1M	5%	1/10W	R427	1-216-821-11	METAL CHIP	1K	5%	1/16W
R358	1-216-669-11	METAL CHIP	5. 6K	0. 5%	1/10W	R428	1-216-821-11	METAL CHIP	1K	5%	1/16W
R359	1-216-667-11	METAL CHIP	4. 7K	0. 5%	1/10W	R429	1-216-821-11	METAL CHIP	1K	5%	1/16W
R360	1-216-073-00	METAL CHIP	10K	5%	1/10W	R430	1-216-821-11	METAL CHIP	1K	5%	1/16W
R362	1-216-103-91	METAL GLAZE	180K	5%	1/10W	R431	1-216-049-00	METAL CHIP	1K	5%	1/10W
R363	1-216-073-00	METAL CHIP	10K	5%	1/10W	R432	1-216-049-00	METAL CHIP	1K	5%	1/10W
R364	1-216-073-00	METAL CHIP	10K	5%	1/10W	R433	1-216-049-00	METAL CHIP	1K	5%	1/10W
R371	1-216-819-11	METAL CHIP	680	5%	1/16W	R434	1-216-049-00	METAL CHIP	1K	5%	1/10W
R372	1-216-298-00	METAL CHIP	2. 2	5%	1/10W	R435	1-216-198-91	METAL GLAZE	1K	5%	1/8W

MAIN

ROTARY

Ref. No.	Part No.	Description	Remark		
R436	1-216-198-91	METAL GLAZE	1K	5%	1/8W
R437	1-216-198-91	METAL GLAZE	1K	5%	1/8W
R438	1-216-198-91	METAL GLAZE	1K	5%	1/8W
R439	1-216-198-91	METAL GLAZE	1K	5%	1/8W
R445	1-216-815-11	METAL CHIP	330	5%	1/16W
R448	1-216-073-00	METAL CHIP	10K	5%	1/10W
R449	1-216-821-11	METAL CHIP	1K	5%	1/16W
R450	1-216-034-00	METAL CHIP	240	5%	1/10W
R451	1-216-035-00	METAL CHIP	270	5%	1/10W
R452	1-216-034-00	METAL CHIP	240	5%	1/10W
R453	1-216-035-00	METAL CHIP	270	5%	1/10W
R454	1-216-034-00	METAL CHIP	240	5%	1/10W
R455	1-216-035-00	METAL CHIP	270	5%	1/10W
R456	1-216-034-00	METAL CHIP	240	5%	1/10W
R457	1-216-035-00	METAL CHIP	270	5%	1/10W
R458	1-216-035-00	METAL CHIP	270	5%	1/10W
R459	1-216-821-11	METAL CHIP	1K	5%	1/16W
R460	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
# R462	1-216-083-00	METAL CHIP	27K	5%	1/10W
R463	1-216-295-00	METAL CHIP	0	5%	1/10W
R464	1-216-833-11	METAL CHIP	10K	5%	1/16W
R601	1-216-041-00	METAL CHIP	470	5%	1/10W
R602	1-216-821-11	METAL CHIP	1K	5%	1/16W
R603	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
< SWITCH >					
SW303	1-572-272-11	SWITCH, SLIDE(MDX-U1/OTHERS)			
< THERMISTOR >					
TH301	1-808-656-11	THERMISTOR			
TH302	1-808-656-11	THERMISTOR			
< CRYSTAL >					
X301	1-760-168-11	VIBRATOR, CRYSTAL(4.5MHz)			
X302	1-579-841-21	VIBRATOR, CERAMIC (CHIP TYPE) (5MHz)			

*	A-3298-179-A	ROTARY BOARD, COMPLETE			

< CAPACITOR >					
C501	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C502	1-164-343-11	CERAMIC CHIP	0.056uF	10%	25V
C503	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C504	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C505	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C506	1-104-760-11	CERAMIC CHIP	0.047uF	10%	50V
C507	1-135-161-21	TANTALUM CHIP	22uF	10%	10V
C508	1-135-161-21	TANTALUM CHIP	22uF	10%	10V
C509	1-164-676-11	CERAMIC CHIP	2200PF	5%	16V

Ref. No.	Part No.	Description	Remark		
C510	1-135-161-21	TANTALUM CHIP	22uF	10%	10V
C511	1-135-161-21	TANTALUM CHIP	22uF	10%	10V
C512	1-162-946-11	CERAMIC CHIP	27PF	5%	50V
C513	1-135-161-21	TANTALUM CHIP	22uF	10%	10V
C514	1-104-760-11	CERAMIC CHIP	0.047uF	10%	50V
C515	1-162-979-11	CERAMIC CHIP	0.0027uF	10%	50V
C516	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C517	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C518	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C519	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C520	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C521	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C522	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C523	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C524	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C525	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C526	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C527	1-135-216-11	TANTALUM CHIP	10uF	20%	10V
C528	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C529	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C530	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C531	1-164-346-11	CERAMIC CHIP	1uF		16V
C532	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C533	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C534	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C535	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C536	1-135-216-11	TANTALUM CHIP	10uF	20%	10V
C537	1-135-166-21	TANTALUM CHIP	47uF	10%	10V
< CONNECTOR >					
CNP501	1-566-533-11	CONNECTOR, FPC (ZIF) 17P			
CNP502	1-566-532-11	CONNECTOR, FPC (ZIF) 16P			
CNP503	1-580-438-21	CONNECTOR, FPC 4P			
CNP504	1-568-238-11	CONNECTOR, FPC (1.0MM) (ZIF) 16P			
CNP505	1-750-575-11	SOCKET, CONNECTOR 6P			
CNP507	1-580-438-21	CONNECTOR, FPC 4P			
* CNP508	1-580-055-21	PIN, CONNECTOR 2P			
CNP509	1-580-055-21	PIN, CONNECTOR 2P			
* CNP511	1-580-055-21	PIN, CONNECTOR 2P			
CNP512	1-580-055-21	PIN, CONNECTOR 2P			
< DIODE >					
D501	8-719-016-74	DIODE	1SS352		
D502	8-719-016-74	DIODE	1SS352		
D503	8-719-210-33	DIODE	EC10DS2		
< IC >					
IC501	8-752-064-33	IC	CXA1380N		
IC502	8-759-234-77	IC	TC4S66F		

Note : # R462 is canceled only when IC308 uses MM1284XFFX.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC503	8-759-234-77	IC TC4S66F		R528	1-216-838-11	METAL CHIP 27K 5% 1/16W	
IC504	8-752-064-34	IC CXA1381R		R529	1-216-824-11	METAL CHIP 1.8K 5% 1/16W	
IC505	8-759-234-77	IC TC4S66F		R530	1-216-809-11	METAL CHIP 100 5% 1/16W	
IC506	8-759-084-72	IC MPC1718FU		R531	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
IC508	8-759-040-83	IC BA6287F		R532	1-216-833-11	METAL CHIP 10K 5% 1/16W	
IC509	8-759-082-61	IC TC4W53FU		R533	1-216-833-11	METAL CHIP 10K 5% 1/16W	
< COIL >				R534	1-216-833-11	METAL CHIP 10K 5% 1/16W	
L501	1-412-039-51	INDUCTOR CHIP 100uH		R536	1-216-821-11	METAL CHIP 1K 5% 1/16W	
L502	1-412-039-51	INDUCTOR CHIP 100uH		R537	1-216-821-11	METAL CHIP 1K 5% 1/16W	
L503	1-412-039-51	INDUCTOR CHIP 100uH		R538	1-216-827-11	METAL CHIP 3.3K 5% 1/16W	
L504	1-412-039-51	INDUCTOR CHIP 100uH		R539	1-216-827-11	METAL CHIP 3.3K 5% 1/16W	
L505	1-410-375-11	INDUCTOR CHIP 3.3uH		R540	1-216-833-11	METAL CHIP 10K 5% 1/16W	
< TRANSISTOR >				< VARIABLE RESISTOR >			
Q501	8-729-403-35	TRANSISTOR UN5113		RV501	1-241-225-11	RES, ADJ, METAL GRAZE 22K	
Q502	8-729-106-60	TRANSISTOR 2SB1115A		RV502	1-241-223-11	RES, ADJ, METAL GRAZE 4.7K	
Q503	8-729-015-76	TRANSISTOR UN5211		RV503	1-241-223-11	RES, ADJ, METAL GRAZE 4.7K	
Q504	8-729-015-76	TRANSISTOR UN5211		RV504	1-241-225-11	RES, ADJ, METAL GRAZE 22K	
Q505	8-729-106-60	TRANSISTOR 2SB1115A		RV505	1-241-225-11	RES, ADJ, METAL GRAZE 22K	
Q506	8-729-015-76	TRANSISTOR UN5211		RV506	1-241-223-11	RES, ADJ, METAL GRAZE 4.7K	
Q507	8-729-808-01	TRANSISTOR 2SD1622-S		RV507	1-241-223-11	RES, ADJ, METAL GRAZE 4.7K	
< RESISTOR >				RV508	1-241-223-11	RES, ADJ, METAL GRAZE 4.7K	
R501	1-216-841-11	METAL CHIP 47K 5% 1/16W		< THERMISTOR >			
R502	1-216-857-11	METAL CHIP 1M 5% 1/16W		TH501	1-808-656-11	THERMISTOR	
R503	1-216-848-11	METAL CHIP 180K 5% 1/16W		*****			
R504	1-216-848-11	METAL CHIP 180K 5% 1/16W		MISCELLANEOUS			
R505	1-216-857-11	METAL CHIP 1M 5% 1/16W		*****			
R506	1-218-448-11	METAL GLAZE 430K 5% 1/16W		62	1-652-649-11	PC BOARD, DISC-LED FLEXIBLE	
R507	1-216-833-11	METAL CHIP 10K 5% 1/16W		163	1-650-600-11	PC BOARD, SENSOR FLEXIBLE	
R508	1-216-845-11	METAL CHIP 100K 5% 1/16W		214	1-650-789-11	PC BOARD, ROTARY FLEXIBLE	
R509	1-218-347-11	METAL GLAZE 91K 5% 1/16W		215	1-651-144-11	PC BOARD, ROTARY FLEXIBLE	
R510	1-216-827-11	METAL CHIP 3.3K 5% 1/16W		216	1-650-790-11	PC BOARD, ROTARY FLEXIBLE	
R511	1-216-826-11	METAL CHIP 2.7K 5% 1/16W		256	1-650-601-11	PC BOARD, BSL FLEXIBLE	
R512	1-216-821-11	METAL CHIP 1K 5% 1/16W		△259	8-583-007-11	DEVICE, MINIATURE DISK KMS-151A	
R513	1-216-825-11	METAL CHIP 2.2K 5% 1/16W		CNJ301	1-765-422-11	CORD (WITH CONNECTOR) (UNI LINK/AUDIO)	
R514	1-216-857-11	METAL CHIP 1M 5% 1/16W		M501	X-3365-845-1	MOTOR ASSY, SL (SLED)	
R515	1-216-819-11	METAL CHIP 680 5% 1/16W		M502	1-698-304-11	MOTOR, BSL	
R516	1-216-845-11	METAL CHIP 100K 5% 1/16W		M503	X-3367-748-1	U/D MOTOR ASSY (UP/DW)	
R519	1-216-849-11	METAL CHIP 220K 5% 1/16W		M504	X-3367-747-1	ROTARY MOTOR ASSY (MD TURN L/R)	
R520	1-218-331-11	METAL GLAZE 51K 5% 1/16W		SW307	1-570-771-11	SWITCH (HOME)	
R521	1-216-813-11	METAL CHIP 220 5% 1/16W		SW501	1-572-467-61	PUSH SWITCH (1KEY) (INNER LIMIT)	
R522	1-218-344-11	METAL GLAZE 7.5K 5% 1/16W		SW502	1-570-771-21	SWITCH (UP/DW)	
R523	1-218-344-11	METAL GLAZE 7.5K 5% 1/16W		*****			
R524	1-216-993-11	METAL GLAZE 2.4K 5% 1/16W					
R525	1-216-800-11	METAL GLAZE 18 5% 1/16W					
R526	1-216-845-11	METAL CHIP 100K 5% 1/16W					
R527	1-218-354-11	METAL GLAZE 160 5% 1/16W					

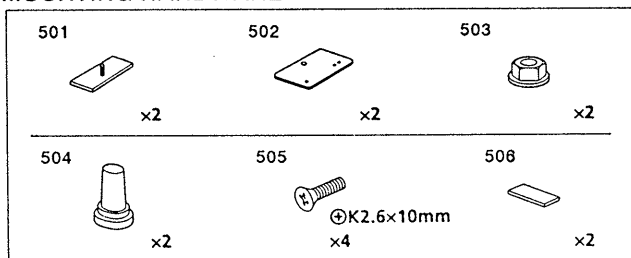
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	

		1-696-795-12 CORD (WITH CONNECTOR)	
		1-696-918-11 CORD, CONNECTION	
*		3-355-207-01 CARDBOARD (E)	
		3-758-723-11 MANUAL, INSTRUCTION (ENGLISH/FRENCH/ GERMAN/SPANISH/CHINES) (AEP, E, German)	
		3-758-723-21 MANUAL, INSTRUCTION (ENGLISH/FRENCH) (US, Canadian)	
		3-758-723-41 MANUAL, INSTRUCTION (DUTCH/SWEDISH/ ITALIAN/PORTUGUESE) (AEP)	
		3-758-724-11 MANUAL, INSTRUCTION, INSTALL (ENGLISH/FRENCH/GERMAN/SPANISH/CHINES) (AEP, E, German)	
		3-758-724-41 MANUAL, INSTRUCTION, INSTALL (DUTCH/ SWEDISH/ITALIAN/PORTUGUESE) (AEP)	
*		3-913-870-01 CUSHION (RIGHT)	
*		3-913-871-01 CUSHION (LEFT)	
*		3-915-448-01 INDIVIDUAL CARTON	
*		X-3368-712-1 SCREW ASSY (B)	

MOUNTING HARDWARE



501	3-915-870-01 BRACKET (A)
* 502	X-3368-710-1 BRACKET ASSY
503	4-304-511-00 NUT (M5), FLANGE
504	3-915-871-01 CAP
505	7-621-559-63 SCREW +K 2.6X10
506	3-913-873-01 CUSHION (COVER)

Ref.No.	Part No.	Description	Remark

		HARDWARE LIST	

#1	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
#2	7-627-554-07	PRECISION SCREW +P 2X2.2 TYPE3	
#3	7-621-773-86	SCREW +B 2.6X4	
#4	7-621-770-67	SCREW +BVTT 2.6X6 (S)	
#6	7-627-850-07	SCREW, PRECISION +P 1.4X2	
#7	7-627-853-57	PRECISION SCREW +P 2X5 TYPE3	
#8	7-624-118-01	RING, RETAINING E-2.5	
#9	7-627-852-98	SCREW, PRECISION +P1.7X4.5TYPE3	
#10	7-627-551-58	SCREW, PRECISION +P 1.4X3	
#11	7-627-850-27	SCREW, PRECISION +P 1.4X3	
#12	7-627-852-48	PRECISION SCREW +P1.7X3.5TYPE3	
#13	7-627-552-18	SCREW, PRECISION +P 1.7X1.6	
#14	7-621-555-10	SCREW +K 2X3	
#15	7-627-553-37	PRECISION SCREW +P 2X3 TYPE 3	
#16	7-621-772-08	SCREW +B 2X3	
#17	7-621-773-95	SCREW +B 2.6X6	

MDX-40

SONY[®] SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

SUPPLEMENT-1

File this Supplement with the Service Manual.

Subject :

1. DISASSEMBLY
2. HOW TO BEND IN A ROTARY FLEXIBLE BOARD
3. TEST MODE
4. ELECTRICAL ADJUSTMENTS
5. EXPLANATION OF IC TERMINALS
6. BLOCK DIAGRAM
7. IC BLOCK DIAGRAMS

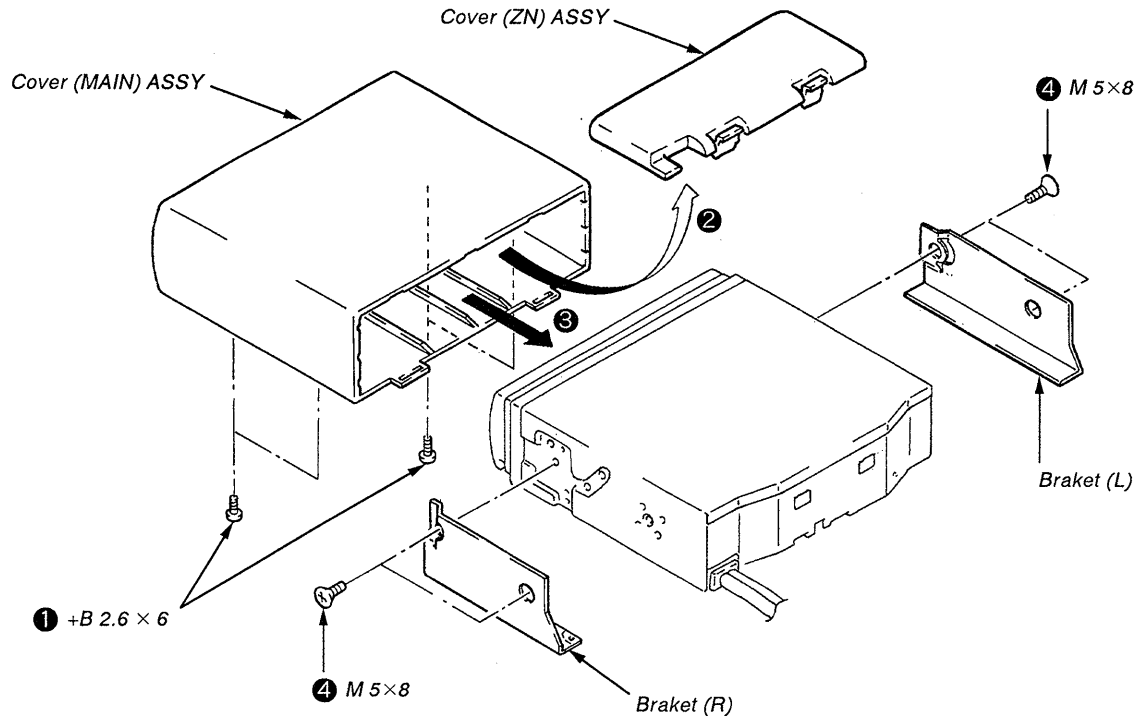
TABLE OF CONTENTS

<i>Title</i>	<i>Page</i>
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2. HOW TO BEND IN A ROTARY FLEXIBLE BOARD	10
3. TEST MODE.....	11
4. ELECTRICAL ADJUSTMENTS	13
5. EXPLANATION OF IC TERMINALS.....	15
6. BLOCK DIAGRAM	19
7. IC BLOCK DIAGRAMS	23

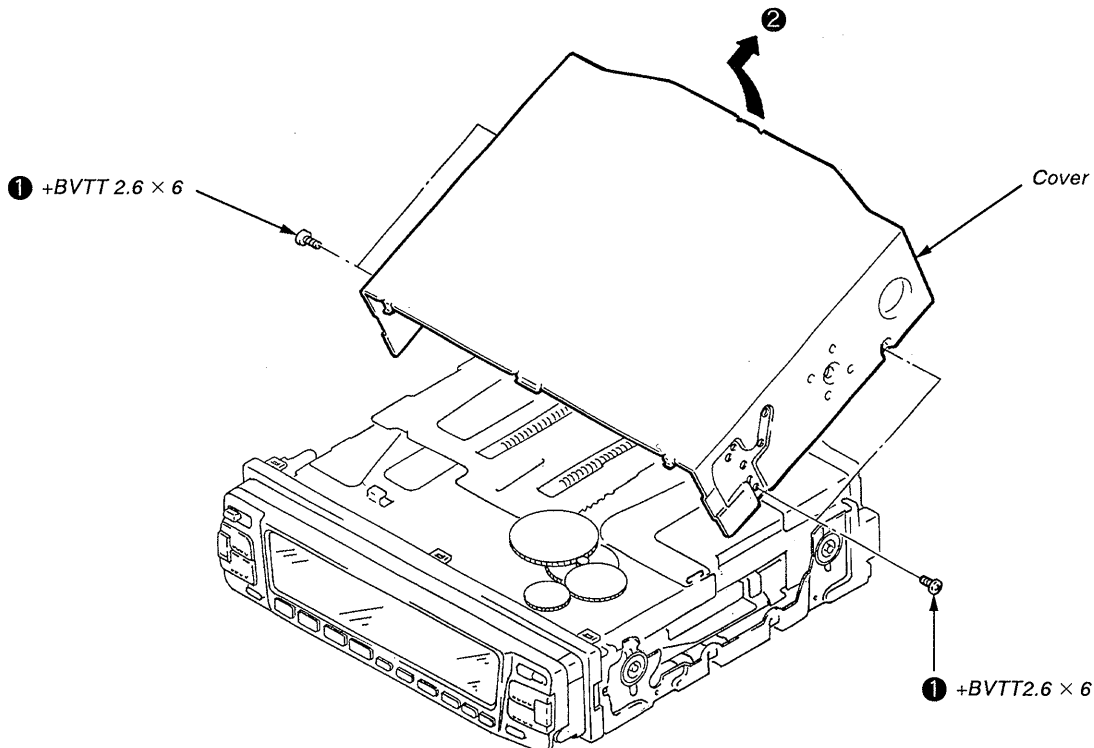
SECTION 1 DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

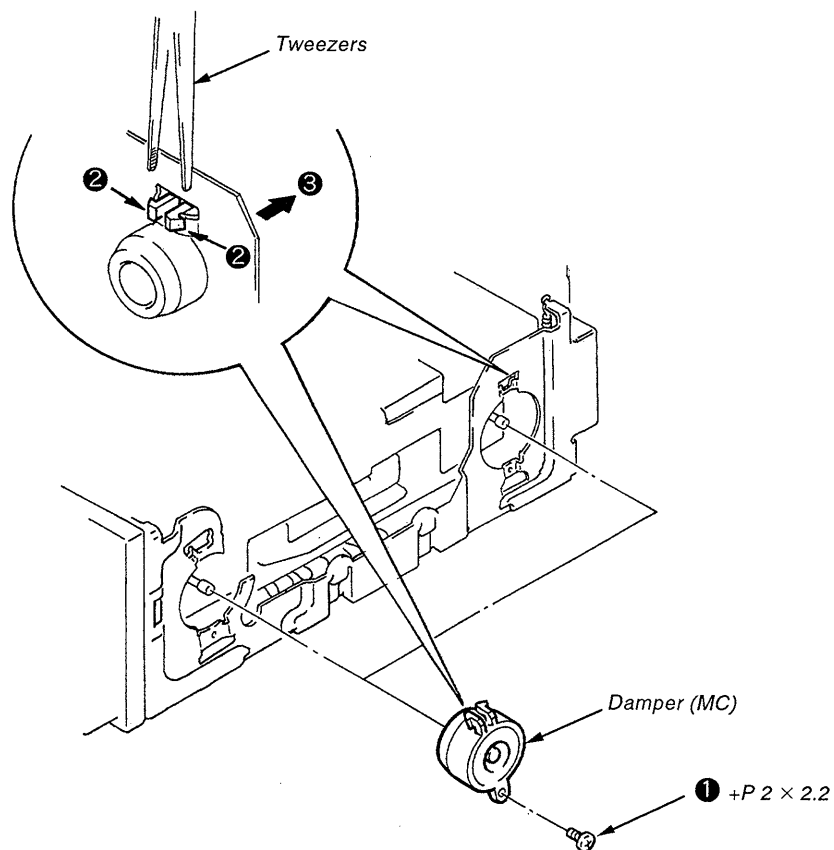
1-1. COVER (MAIN), BRACKET L/R



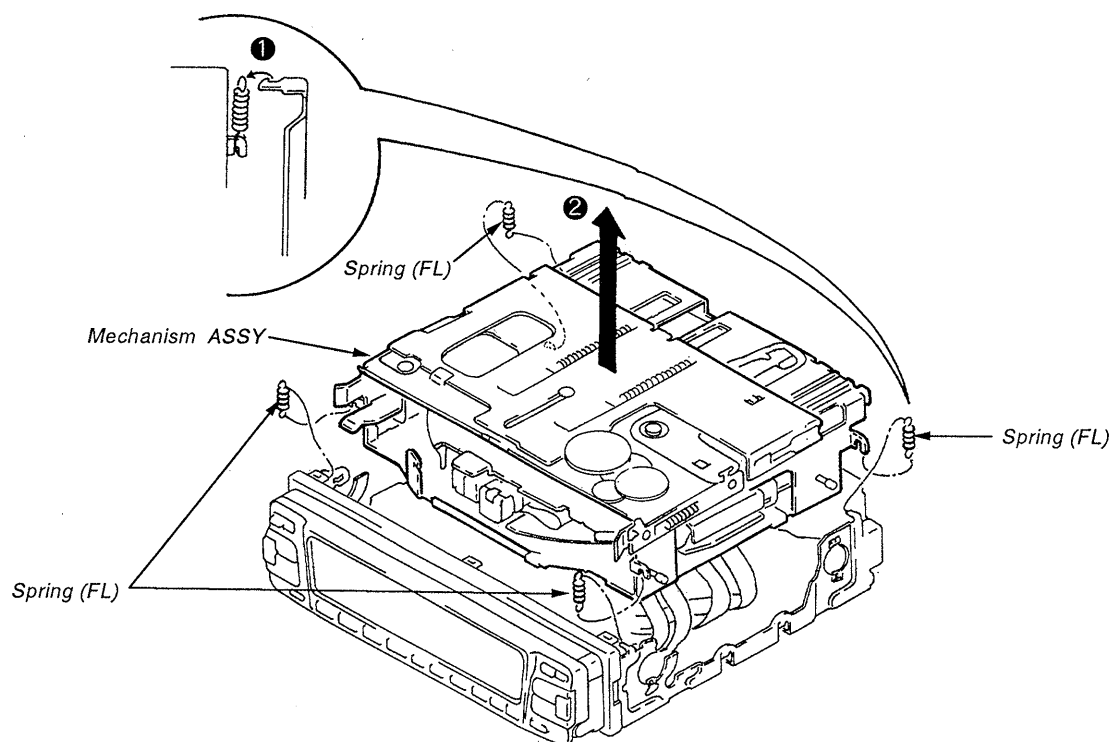
1-2. COVER ASSY



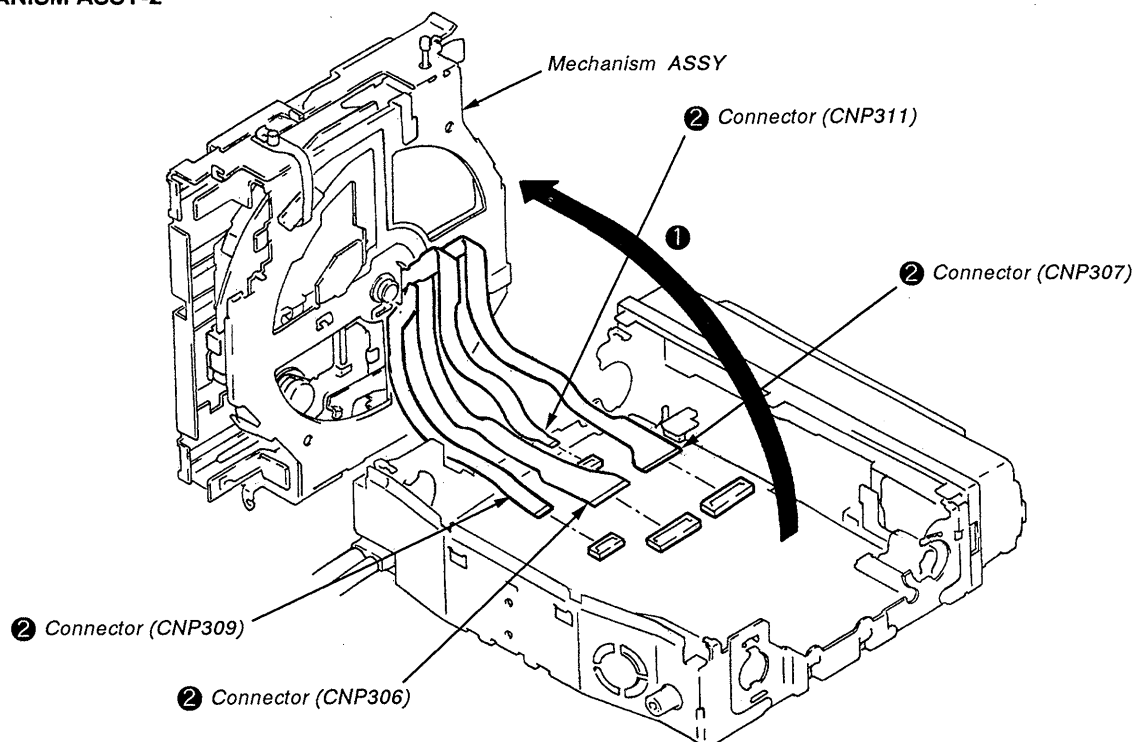
1-3. DAMPER (MC)



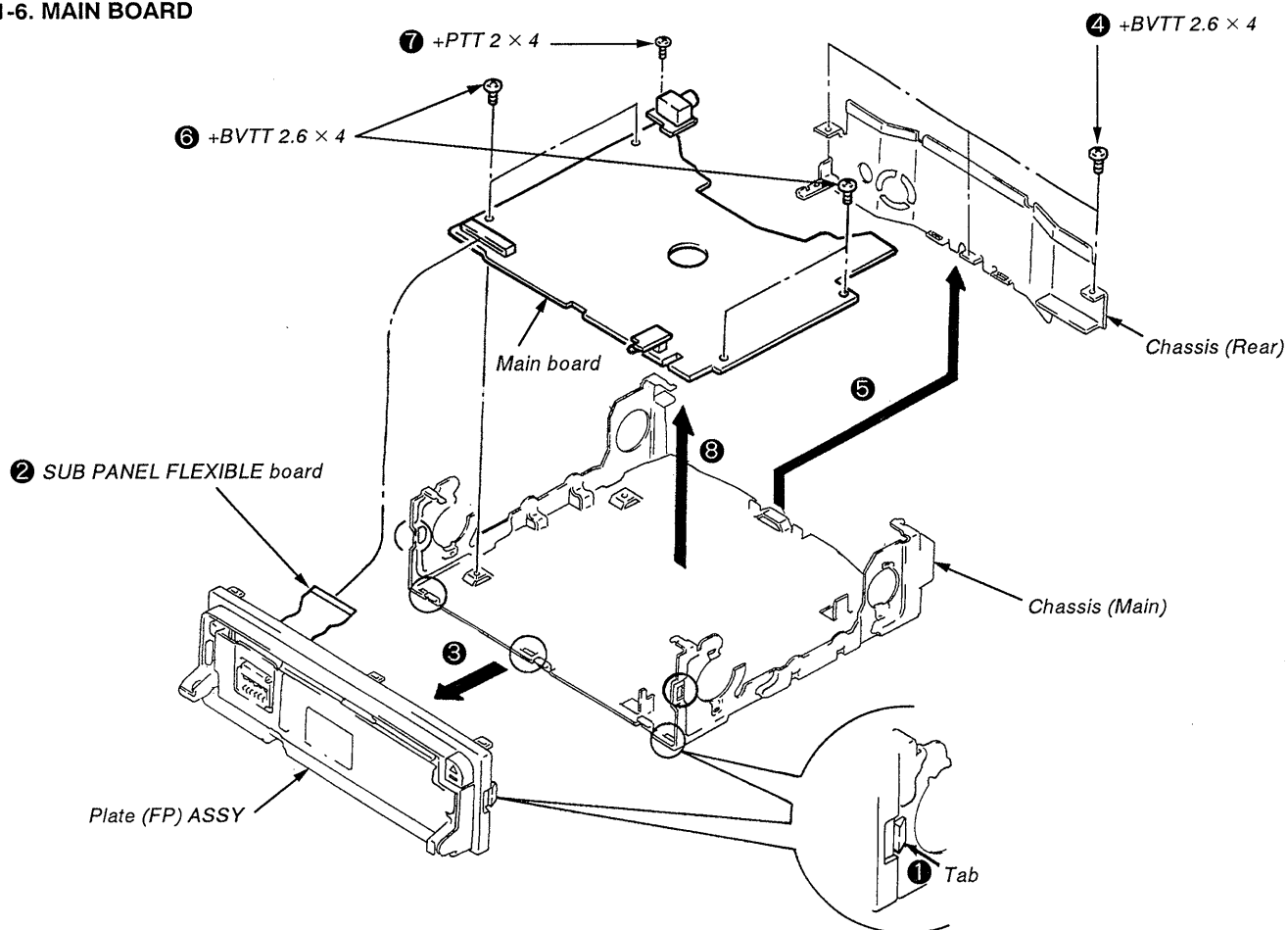
1-4. MECHANISM ASSY-1



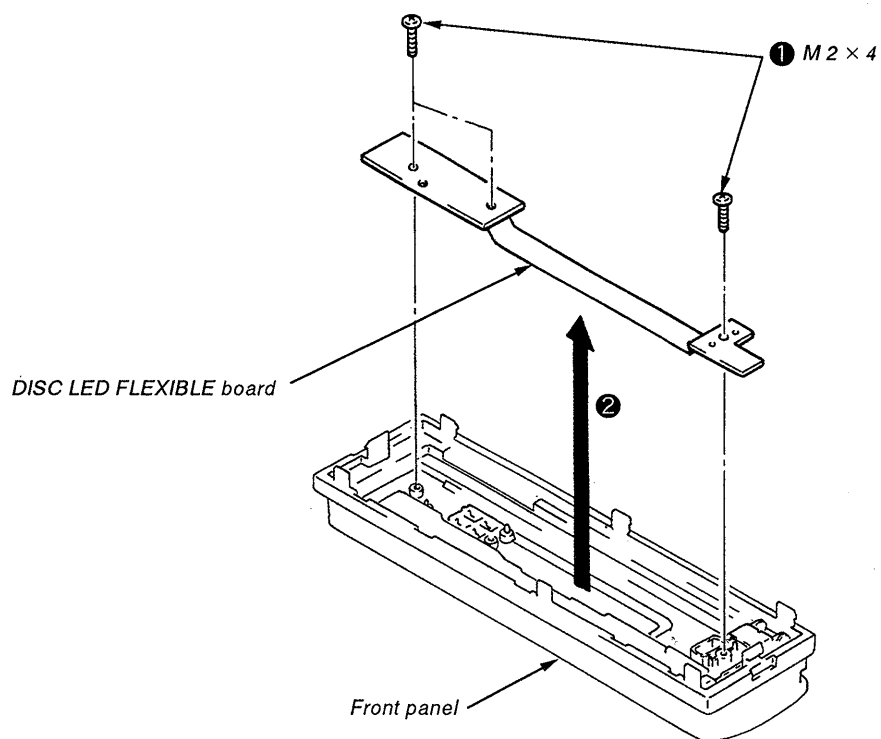
1-5. MECHANISM ASSY-2



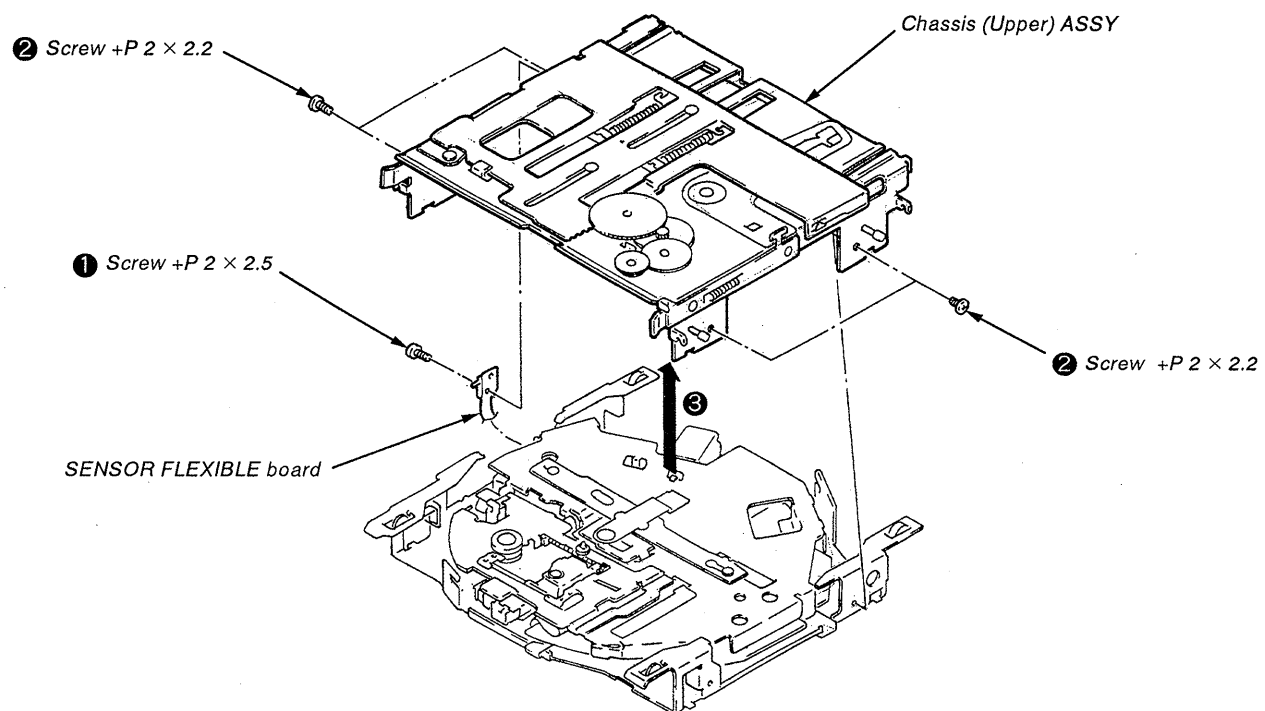
1-6. MAIN BOARD



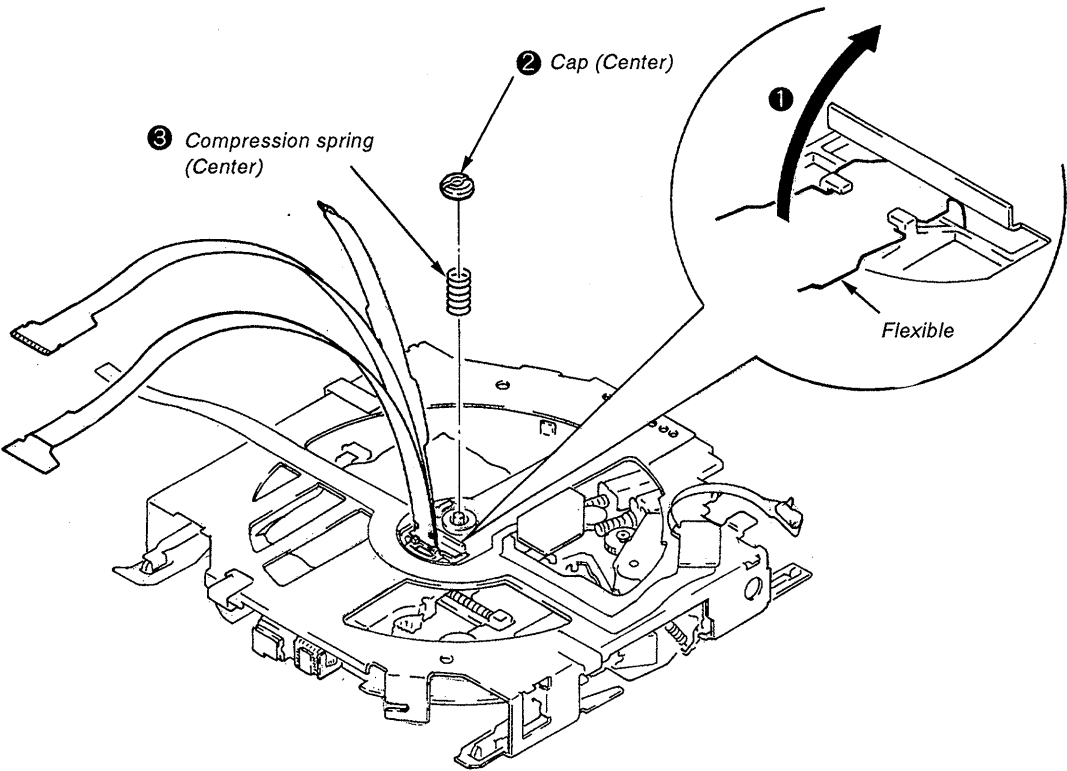
1-7. DISC LED FLEXIBLE BOARD



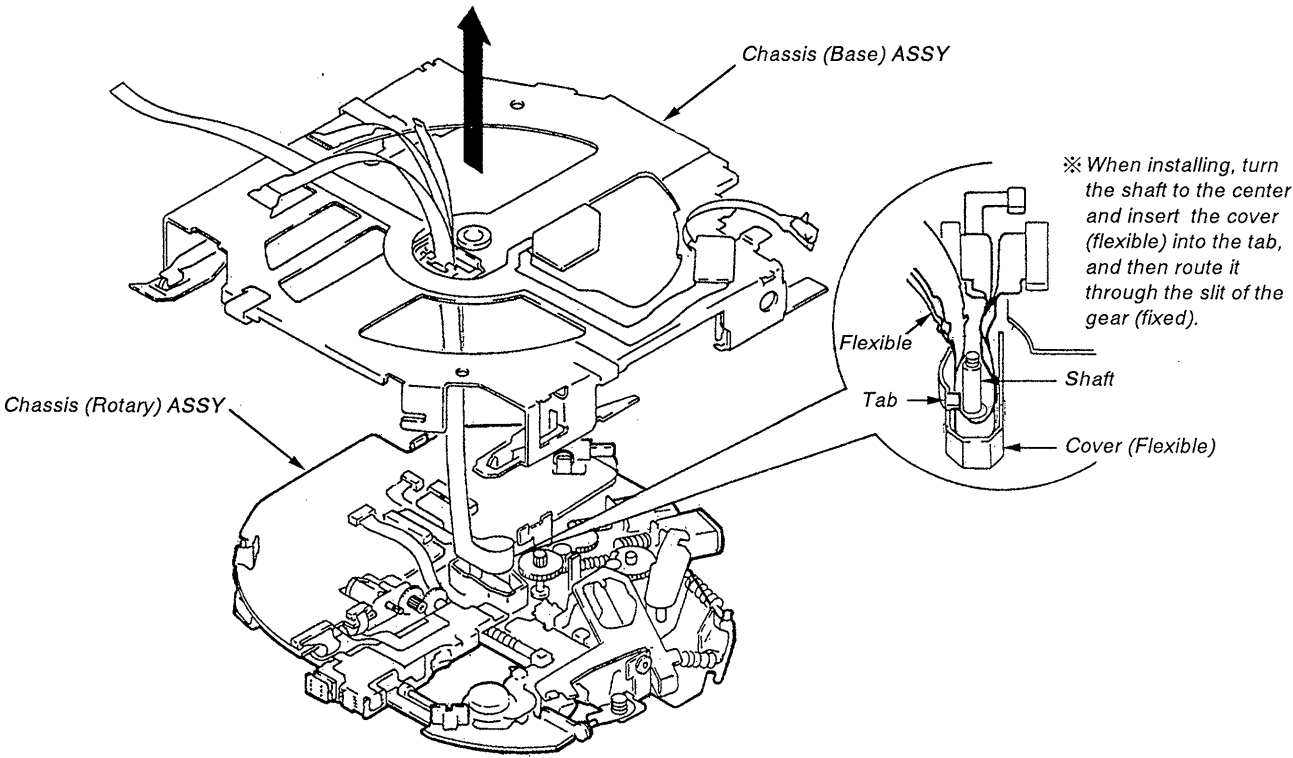
1-8. SENSOR FLEXIBLE BOARD, CHASSIS (UPPER) ASSY



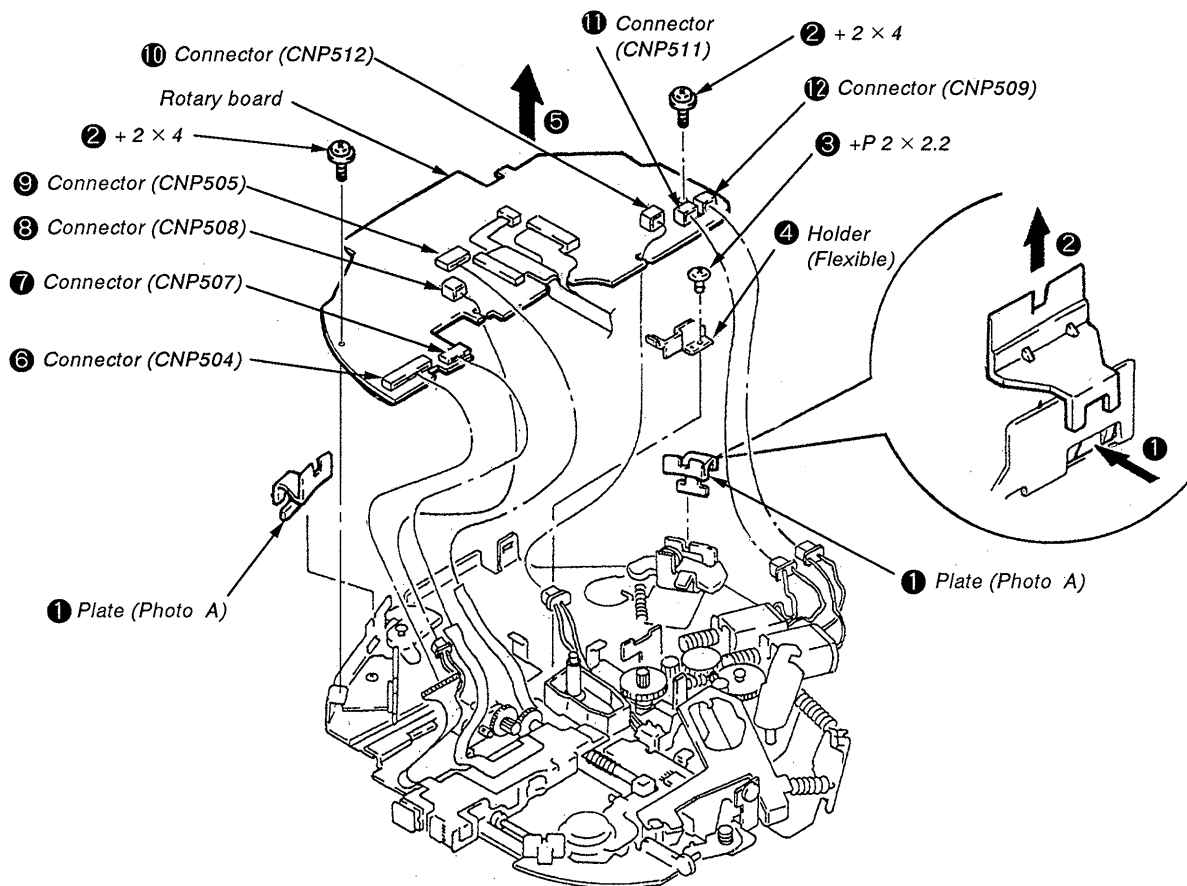
1-9. CHASSIS (ROTARY) ASSY-1



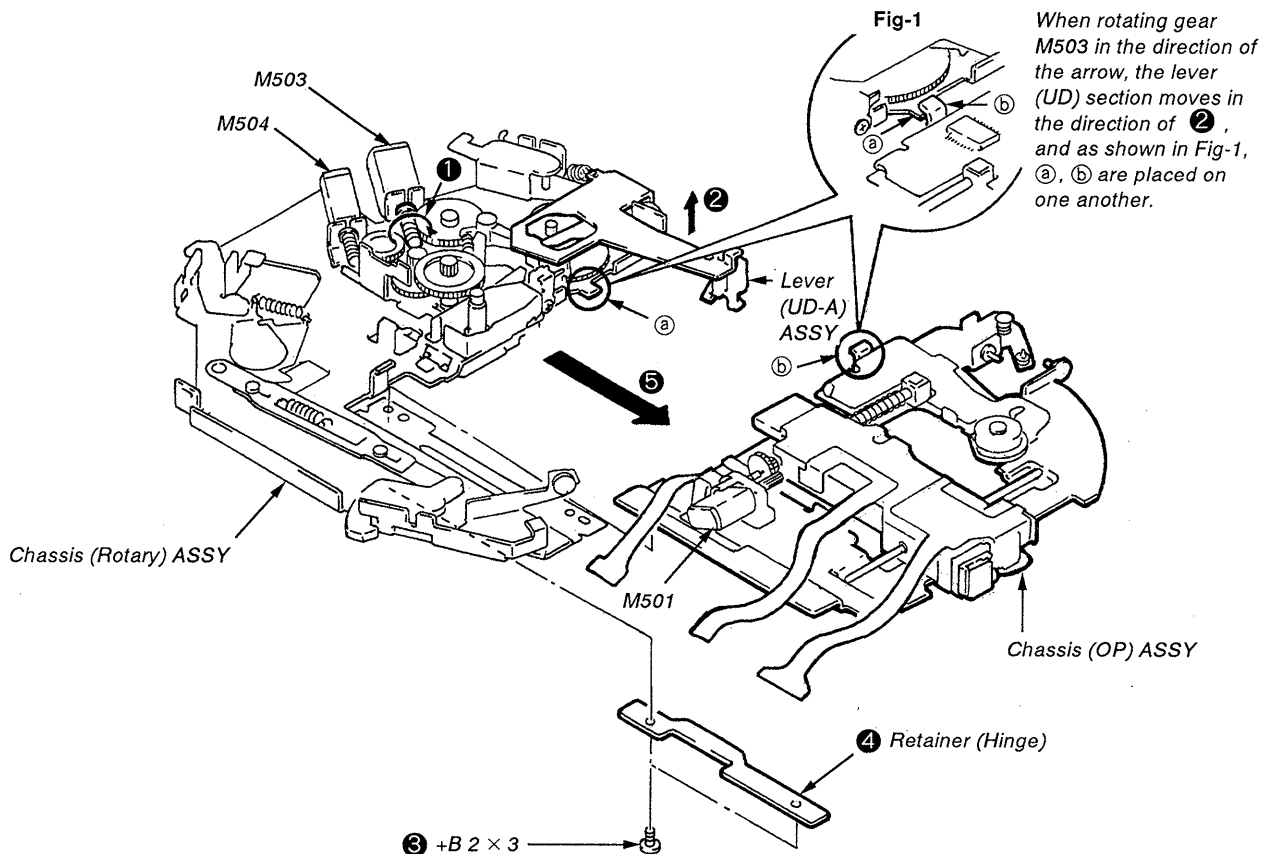
1-10. CHASSIS (ROTARY) ASSY-2



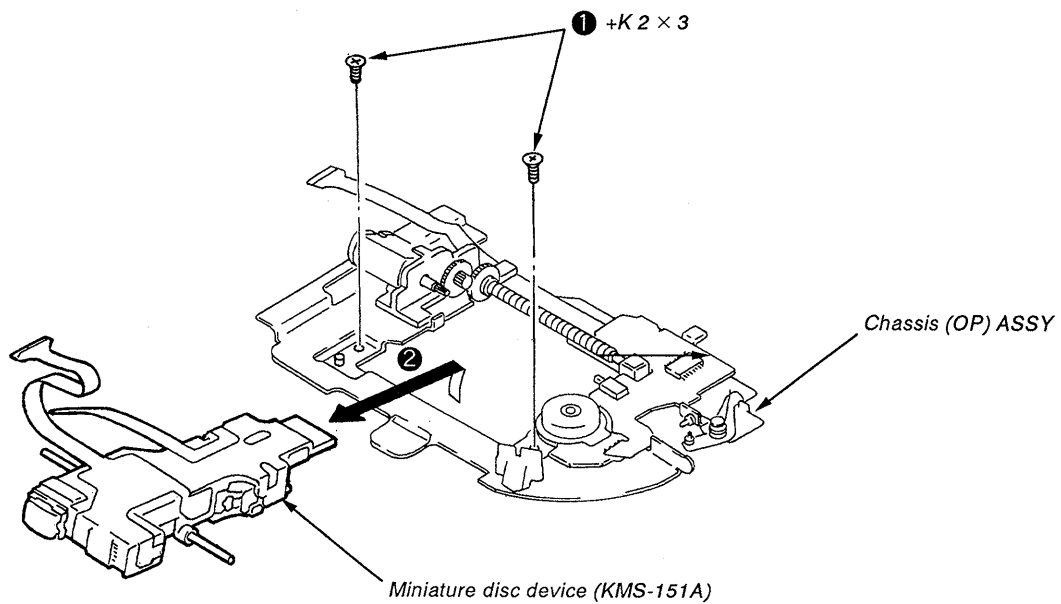
1-11. ROTARY BOARD



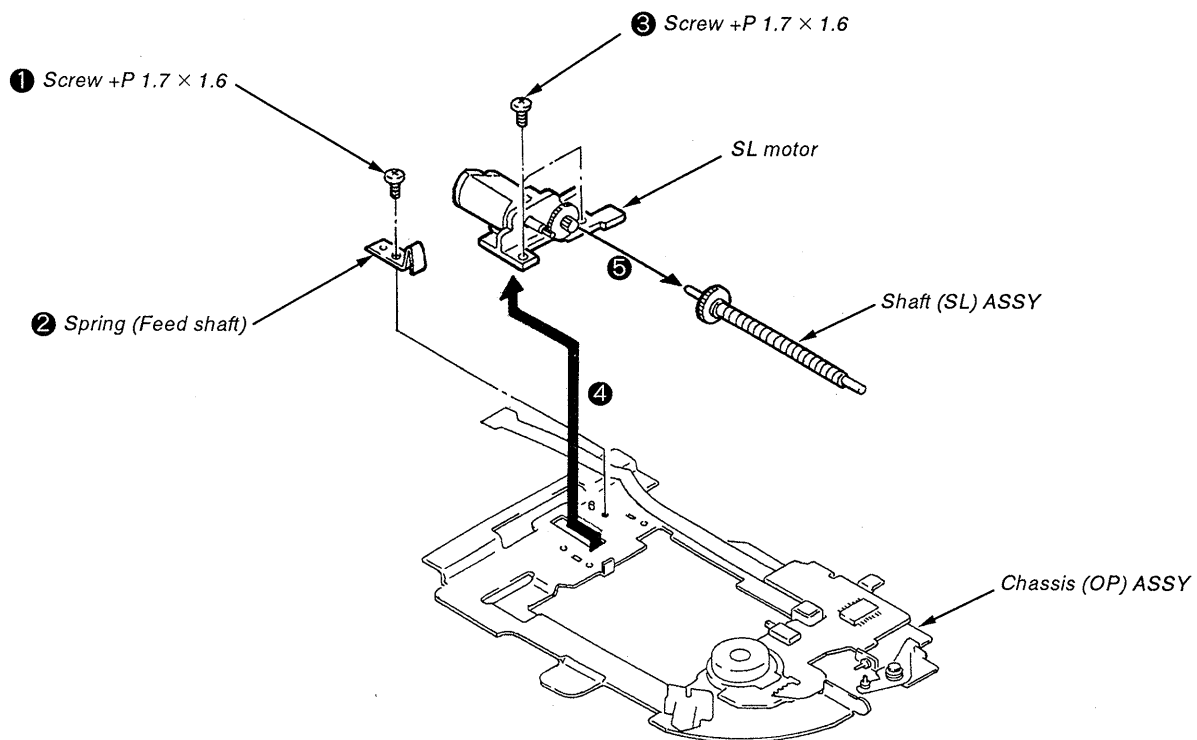
1-12. CHASSIS (OP) ASSY



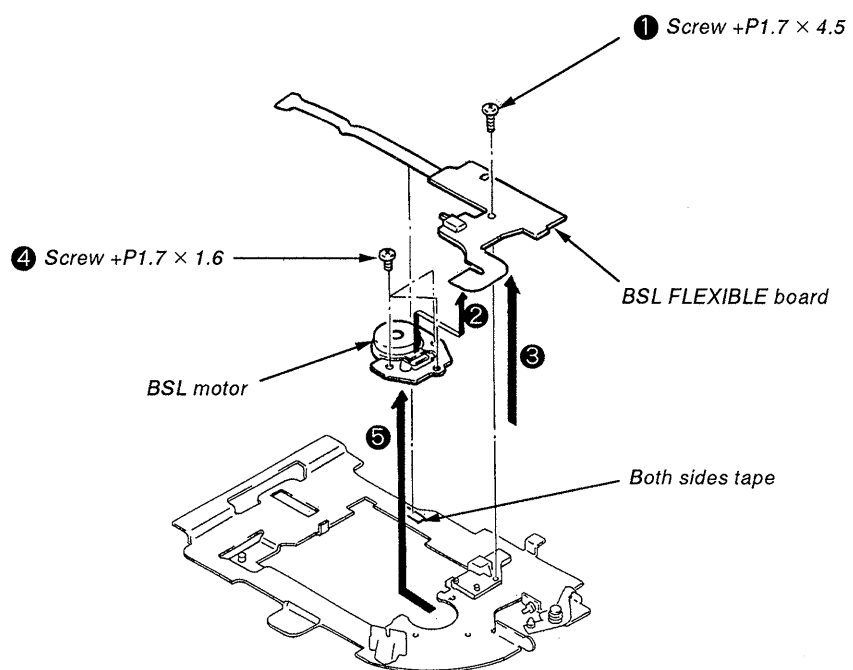
1-13. MINIATURE DISC DEVICE (KMS-151A)



1-14. SL MOTOR/SHAFT (SL) ASSY

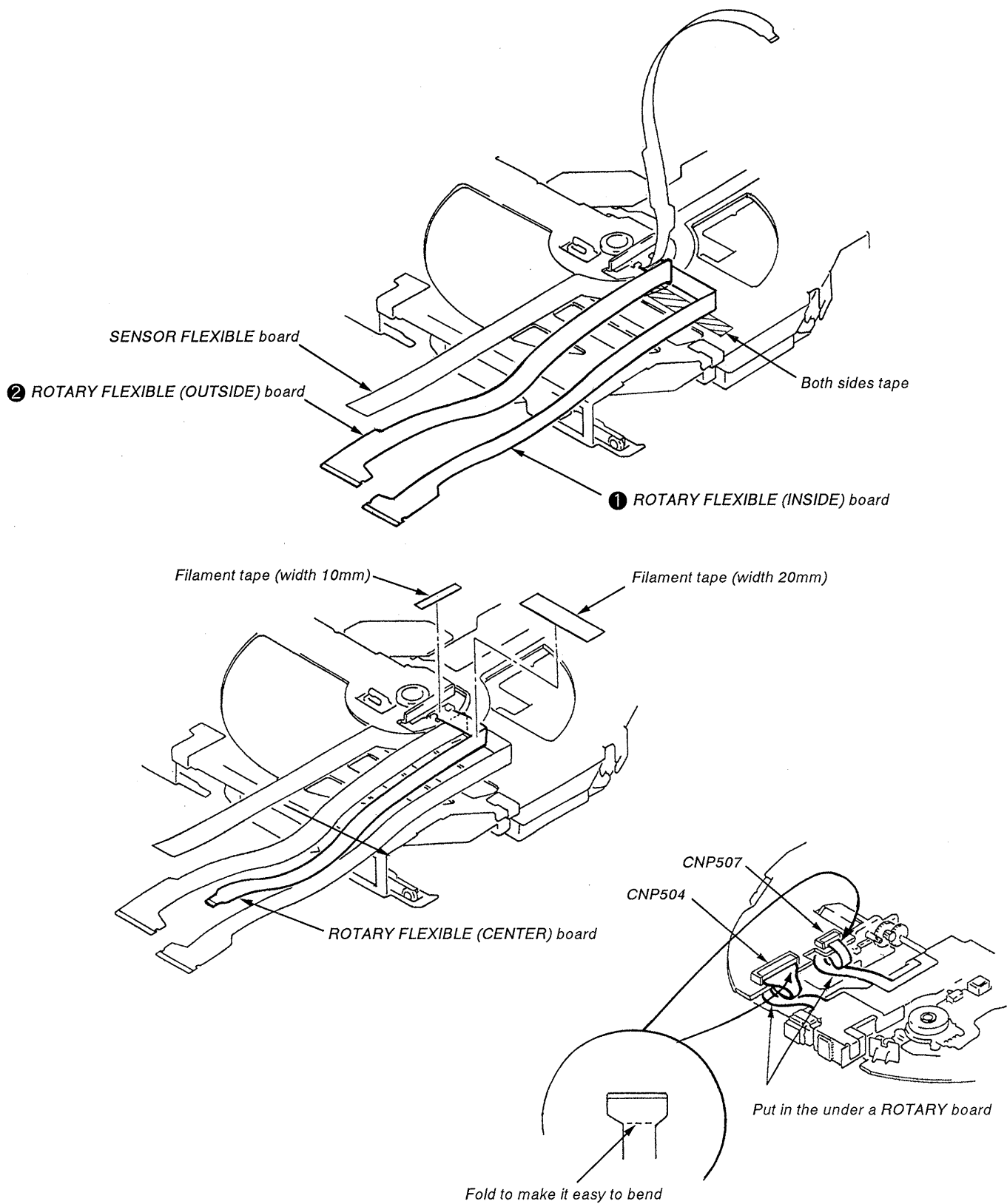


1-15. BSL MOTOR



SECTION 2

HOW TO BEND IN A ROTARY FLEXIBLE BOARD



SECTION 3

TEST MODE

OUTLINE OF TEST MODE

Mechanism and servo test mode are described here. Test mode can operate independently with only the mechanism deck, and it changes by the key input from nose panel. During test mode, ⑤ Pin (Lock) terminal of IC306 (CXD2525R) becomes interlocked with the display. The test mode is divided into MD test mode (indash test mode) and set test mode (test mode of the entire system).

Note :

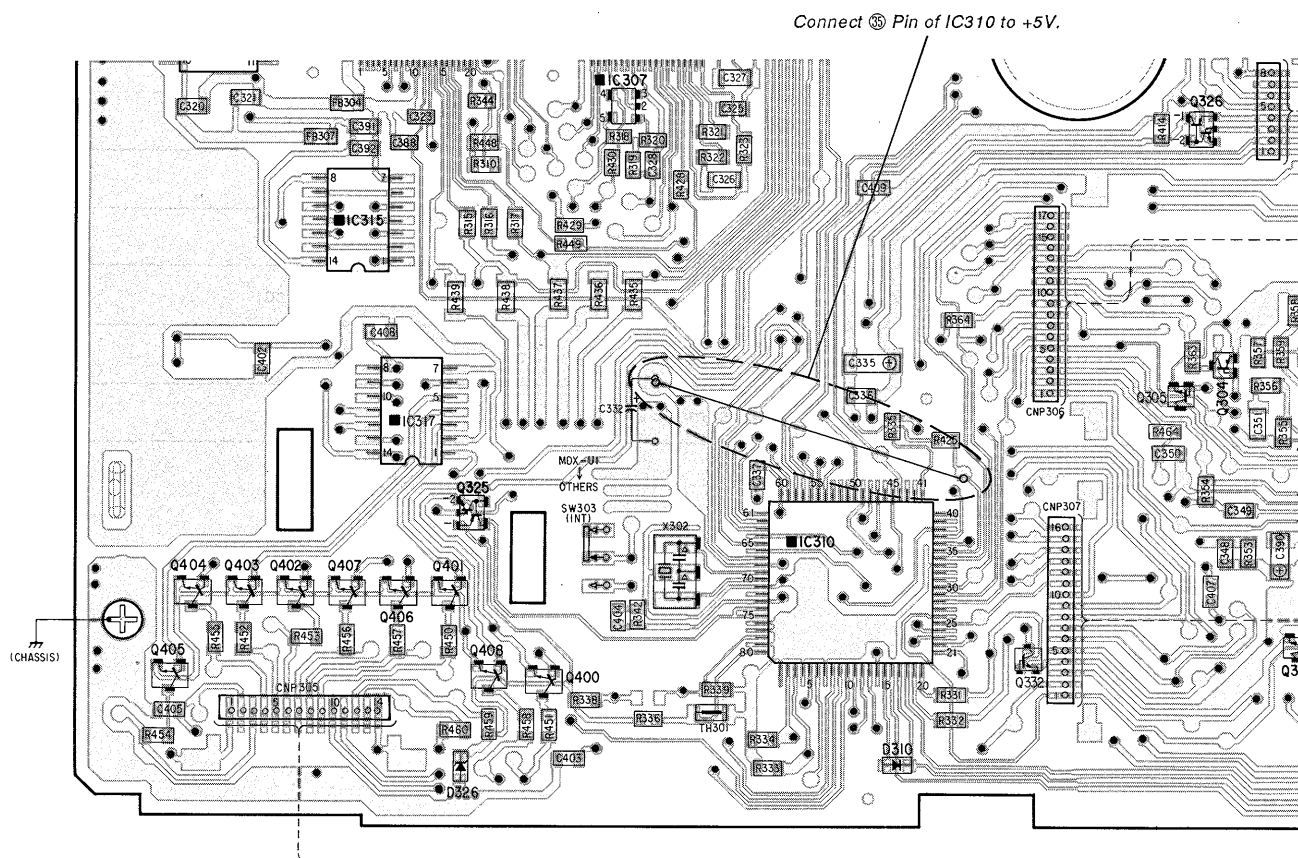
A master unit is required to operate this unit (XR-705 or XR-805).
In the test mode or during electric adjustment, the buttons on the master unit shall be used.

Set (entire system) test mode setting

1. Press preset button **4**.
2. Press preset button **5**.
3. Press preset button **1** for about 2 seconds.
4. All ON appears on the display, and test mode becomes set.
(To cancel the test mode, press **OFF** button.)

MD (indash) test mode setting

1. Press the **MD** button in test mode with the above setting (entire system).
2. Press the preset button **4** longer than 1 second, and stop the MD player.
(To cancel the test mode, press the **OFF** button of the master unit.)



1. Playback Test Mode (Set (entire system) at the time of test mode and MD (indash) test mode)

No.	Key input	Operation
1	Press <input type="button" value="MD"/> button	Regular playback test mode becomes set.
2	Press <input type="button" value="1"/> button for 1 second	AMS down occurs.
	Press <input type="button" value="2"/> button for 1 second	AMS UP occurs.
	Press <input type="button" value="3"/> button for 1 second	PLAY mode (SHUFFLE OFF/INTRO SHUFFLE 2)
	Press <input type="button" value="4"/> button for 1 second	MD stops.

2. Mechanism/Servo Test Mode (MD (indash) at the time of test mode)

No.	Key input	Operation
1	Press the <input type="button" value="4"/> button for 1 second in test mode with the MD playback	Mechanism/servo test mode
2	Press <input type="button" value="1"/> button for 1 second	High speed FOCUS serch/CLV ON.
	Press <input type="button" value="2"/> button for 1 second	TRACKING SLED ON (CLVP)/OFF (CLVS) (Can be pressed only when FOCUS ON)
	Press <input type="button" value="3"/> button for 1 second	Point feed during SLED (300ms peripheral feed, after innermost peripheral feed)
	Press <input type="button" value="4"/> button for 1 second	Servo STOP
	Press <input type="button" value="5"/> button for 1 second	Pre-MD LD ON/OFF (Switches over every time pressed)
	Press <input type="button" value="6"/> button for 1 second	Rec-MD LD ON/OFF (Switches over every time pressed)
	Press <input type="button" value="7"/> button for 1 second	SLED FW (While pressed)
	Press <input type="button" value="8"/> button for 1 second	SLED RVS (While pressed)
	Press <input type="button" value="9"/> button for 1 second	DISC chucking/release (State reversed every time pressed)
	Press <input type="button" value="10"/> button for 1 second	DISC UP (1 – 2 – 3 – 4 – 1 address set, every time when pressed)
3	Press <input type="button" value="OFF"/> button for 1 second	Causes test mode off/reset.

SECTION 4 ELECTRICAL ADJUSTMENTS

Setting of Test Mode

1. Press **[OFF]** button (OFF state becomes set).
2. Press preset **[4]** button.
3. Press preset **[5]** button.
4. Press the preset button **[1]** for approximately 1 second.
5. Entire display turns ON, and test mode is instated.

Prior to Adjustment

1. Set MD (indash) test mode (See page 11).
2. The functions of each button at this time are as per mechanism/servo test mode (See page 12).
3. Make all the adjustments in test mode, as in the given order.

FOK OFFSET Adjustment

1. Connect VOM between IC504 ① (VR) and ③③ (ABCD).
2. Press **[6]** for 1 second (LASER ON), and adjust RV501 so that the VOM reading becomes $-200 \pm 10\text{mV}$.
3. Press **[4]** for 1 second (STOP).

Laser Power adjustment

- Method using the laser power meter
 1. Turn ON the laser by pressing **[6]** for 1 second.
 2. Adjust the position of SLED by pressing **[3]** for 1 second.
Adjust RV506 so that a laser output of $810 \pm 5 \mu\text{W}$ is obtained with 780nm setting.
- Method using EYE PATTERN
Set a playback DISC (Pre-master DISC), turn ON PLAY, and adjust RV506 so that 1.4Vp-p is obtained.

MO Focus Bias Adjustment

1. Connect VOM between IC504 ① (VR) and ②② (FE).
2. Press **[6]** for 1 second (LASER ON), and adjust RV504 so that the VOM reading becomes $-300 \pm 10\text{mV}$.
3. Press **[4]** for 1 second (STOP).

PIT Focus Bias Adjustment

1. Connect VOM between IC504 ① (VR) and ②② (FE).
2. Turn ON the laser by pressing **[5]** for 1 second (LASER ON).
3. Adjust RV505 so that the VOM reading becomes $-100 \pm 10\text{mV}$.
4. Press **[4]** for 1 second (STOP).

PIT E-F Balance Adjustment

1. Connect VOM between IC504 ① (VR) and ②④ (TE).
2. Set DISC (PIT).
3. Press **[1]** for 1 second (FOCUS ON), and adjust RV502 so that the VOM reading becomes $-0 \pm 10\text{mV}$ (Check both playback DISC and MO DISC).

MO E-F Balance Adjustment

1. Connect VOM between IC504 ① (VR) and ②④ (TE).
2. Set DISC (MO).
3. Press **[1]** for 1 second (FOCUS ON), and adjust RV503 so that the VOM reading becomes $-0 \pm 10\text{mV}$ (Check both playback DISC and MO DISC).

Focus/Tracking Gain Adjustment

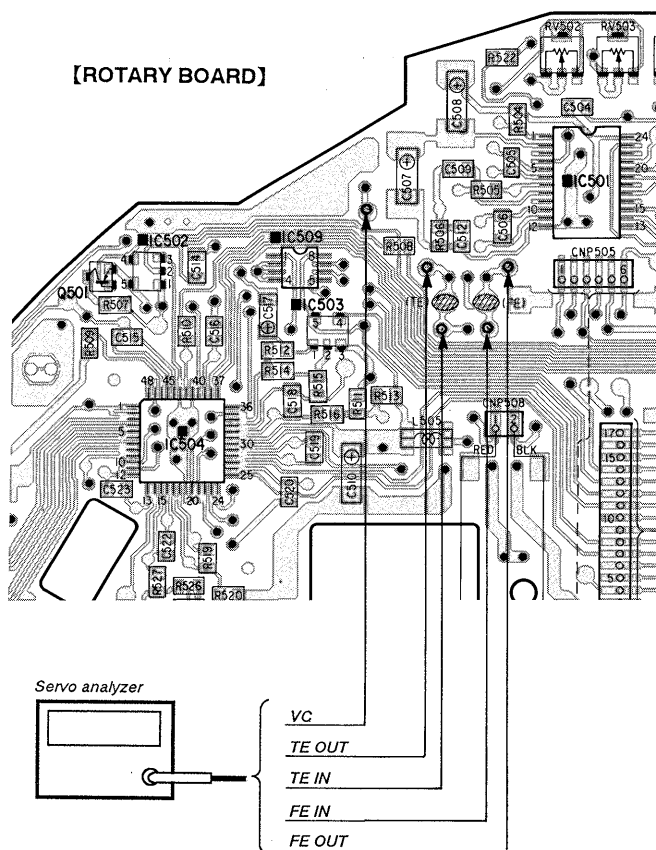
- Servo analyzer is needed to make this adjustment accurately.
 - Only adjust the servo gain when the pickup is replaced.
- In other cases, do not adjust the servo gain unless you have a servo analyzer.

Method of connecting to servo analyzer :

1. Disconnect the 2 soldered jumpers of TE & FE, and connect the servo analyzer as shown in the following diagram. At this time, connect IC504 to the output of servo analyzer, and the volumes to the input of servo analyzer.
2. Set the disturbance of servo analyzer at 1.2kHz, 50mV.

Procedure :

1. Insert MO disc (SONY 60 minute) in its magazine, and place it in the set.
2. Set MD (indash) test mode (See page 11).
3. Turn ON the FOCUS and CLV by pressing **[1]**.
4. Turn on the tracking servo by pressing **[2]**, and adjust RV507 (Tracking Gain Adjustment) and RV508 (Focus Gain Adjustment) so that both the tracking and focus become -1 ± 0.5 dB.
5. Disconnect the servo analyzer, and short the 2 soldered jumpers of TE & FE.



Simple adjustment method

- When replacing the semi-fixed resistor for servo gain adjustment, set the new semi-fixed resistor to the same position as the old semi-fixed resistor, then adjust as follows.

Not using the servo gain adjustment jig

1. Focus gain adjustment

Play the 11th song of the defect disc fingerprint disc for at least 1 minute and check that not even one FOK drops out. Only if one does drop out, lower the gain so that no FOK drops out.

2. Tracking gain adjustment

Play the defect disc dot band disc and check for one minute that the servo does not lose tracking (lock drop out) on any of the tracks. Only if the lock is lost for a track, lower the gain so that the lock is not lost.

Using the servo gain adjustment jig (AEP, UK model only)

Connect the servo gain adjustment jig and adjust as follows.

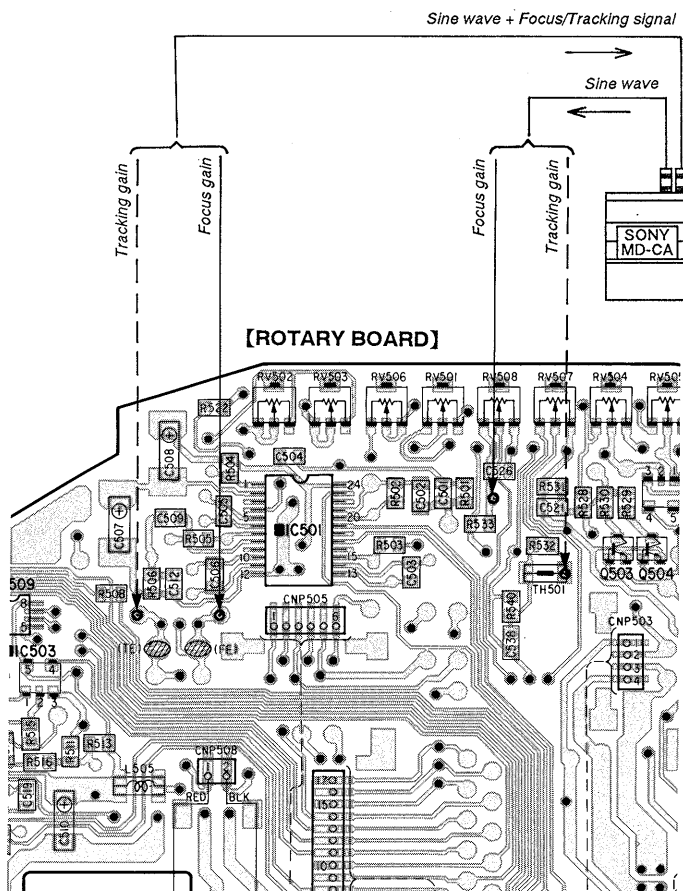
1. Focus gain adjustment

Adjust RV508 so that the servo gain adjustment jig phase is 90° .

2. Tracing gain adjustment

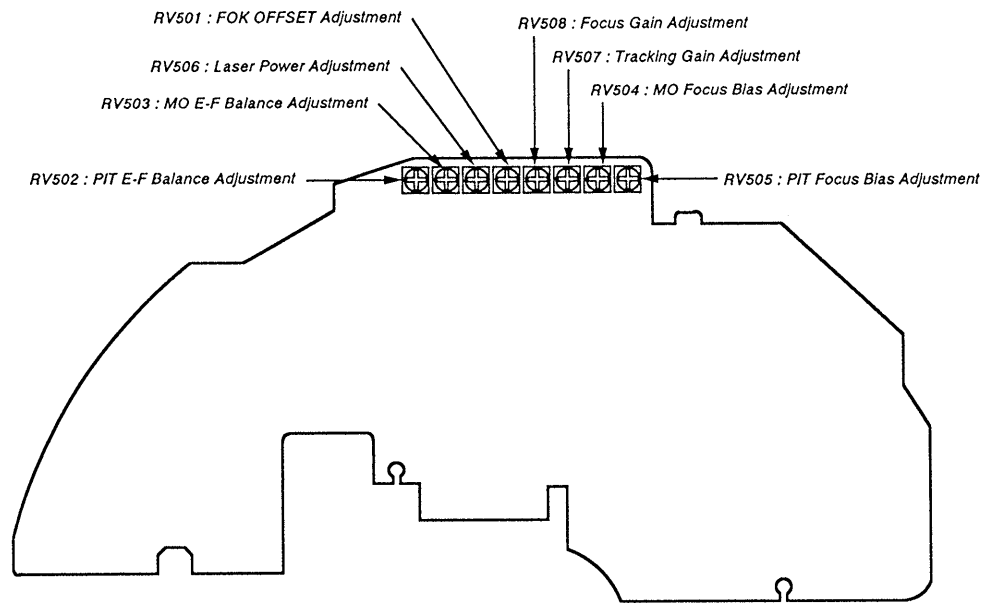
Adjust RV507 so that the servo gain adjustment jig phase is 100° .

Note : For sets for which C538 (0.001) is not mounted, connect R540 (10K) in parallel and adjust.



Adjustment Location :

[ROTARY BOARD] (Conductor side)



SECTION 5

EXPLANATION OF IC TERMINALS

IC301 AK4318 (MAIN BOARD)

Pin No.	Pin name	I/O	Description
1	NC	—	Not used. (OPEN)
2	VREF	O	Reference voltage output terminal. (AVDD) – 3.6V
3	NC	—	Not used (GND connection in this device).
4	AVDD	—	Analog power supply terminal. (+5V)
5	AVSS	—	Analog GND terminal.
6	TST	I	Test pin. Set open or at “L” (GND connection, in this device).
7	ZMUTE	I	Zero mute terminal Detects zero input and mutes the output, while “H”. (OPEN, in this device)
8	DIF0	I	Input format terminal (GND connection, in this device). Handles 4 modes.
9	DIF1	I	
10	DVSS	—	Digital GND terminal.
11	DVDD	—	Digital power supply terminal. (+5V)
12	LRCK	I	L/R Clock terminal Determines the channel of the input serial data.
13	BICK	I	Serial bit clock terminal. Clocks for latching the serial data.
14	SDATA	I	Serial data input terminal. 2’s Complement, MSB first
15	$\overline{\text{PD}}$	I	Reset terminal. Filter and modulator become reset, when this pin is set at “L”.
16	XTI	I	Clock input terminal. Either a crystal oscillator is connected between this pin and XTO, or external CMOS clocks are input to XTI. The frequency of clocks can be selected with CKS pin.
17	XTO	O	Quartz oscillator output terminal. When using a quartz oscillator, it connected between this pin and XTI. When using external clocks, this pin is kept open. (OPEN, in this device)
18	SMUTE	I	Soft mute terminal. (pull down pin) Starts soft mute while “H”, and cancels it while “L”. (OPEN, in this device)
19	DEMO	I	De-emphasis mode terminal. Corresponds to frequency.
20	DEMI	—	Not used (GND connection, in this device).
21	CKS	I	Clock selection terminal (GND connection, in this device). “L” : CLS=256fs, “H” : CLK=384fs
22	DZF	I	ZERO input detected terminal.
23	AOUTR –	O	R ch Analog negative output terminal.
24	AOUTR+	O	R ch Analog positive output terminal.
25	AOUTL –	O	L ch Analog negative output terminal.
26	AOUTL+	O	L ch Analog positive output terminal.
27, 28	NC	—	Not used. (OPEN)

IC310 μ PD78056YGC-W08-3B9 (MAIN BOARD)

Pin No.	Pin name	I/O	Description
1	NOSE SW	I	Input terminal showing front panel or no front panel. 5V : Front panel, 0V : No front panel (GND connection, in this device).
2	HOME/TOP SW	I	Input terminal of HOME as well as TOP POSITION detecting SW of TURN TABLE. 5V : HOME, 2.5V : TOP, 0V : Others
3	PANEL	I	Input terminal showing OPEN/CLOSE of front panel. 5V : CLOSE, 0V : OPEN .
4	AVss	—	GND Potential of A/D converter.
5	LDPOWER	O	Laser power adjusting terminal. L : Low reflection DISC (MO) 0.5mW : 2.9V, H : High reflection DISC (CD) 0.25mW: 2.7V
6	RMS	—	RMS Output of DRAM (D/A output). (OPEN, in this device).
7	AVREF1	—	Reference voltage input of D/A converter. (GND)
8	LCD-BUSY	I	Terminal to input BUSY from LED driver. (74HC164AF)
9	LCD-DATAOUT	O	Terminal to output DATA to LED driver. (74HC164AF)
10	LCD-CLKOUT	O	Terminal to output CLK to LED driver. (74HC164AF)
11	SRDT	I	Terminal to input READ DATA for serial communication to MD servo IC.
12	SWDT	O	Terminal to output WRITE DATA for serial communication to MD servo IC.
13	SCK	O	Terminal to send CLOCK for serial communication to MD servo IC.
14	LINKOFF	—	Not used. (OPEN)
15	BUS-REQUEST	O	<div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; display: inline-block;"> Terminals for uni-link </div>
16	BUS-DATAIN	I	
17	BUS-DATAOUT	O	
18	BUS-CLKIN	I	
19	RF-SW0	O	DISC Mode. L : MO, H : CD
20	RF-SW1	O	DISC Mode. L : GROOVE, H : PIT
21	ASY-SW	O	At the time of PIT playback : Fixed at HIGH At the time of MO playback : Always H, L at the time of track jump
22	AGC-SW	O	L : FOCUS end (AGC time constant long), H : FOCUS start (AGC time constant short)
23	MIRR-SW	O	At the time of PIT playback : Fixed at LOW At the time of MO playback : Always H, CLV at the time of track jump, L until the build up of ON of tracking & thread becomes OK.
24	DFCT-SW	O	L : All servo ON, H : FOCUS start
25	SLD-MUTE	O	Motor drive control output terminal. L : OFF, H : ON
26	LD ON	O	LASER ON/OFF output. L : ON, H : OFF
27	NC	—	Not used. (OPEN)
28	CD/MO	I	CD/MO Identifying terminal. H : CD, L : MO
29	SENS	I	Terminal to input SENSE from CXA1082, CXD2525.
30	LOCK	I	Terminal to input from CXD2525. L : CLV UNLOCK, H : CLV LOCK

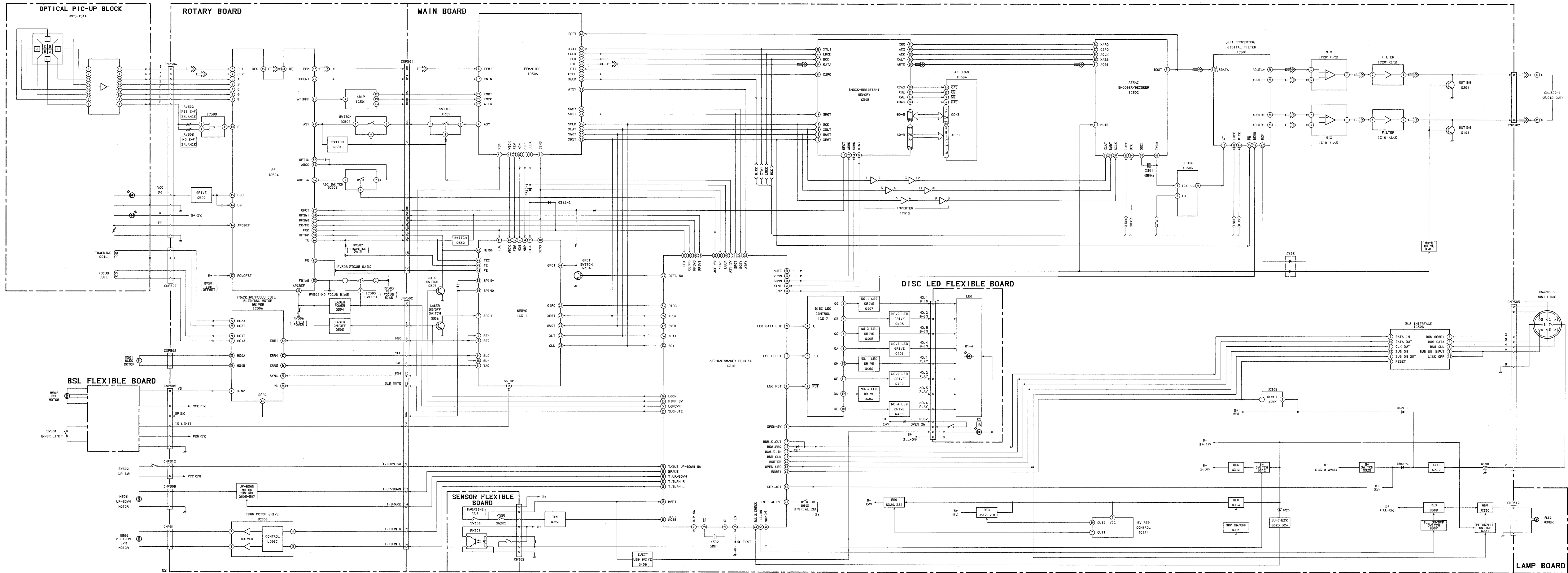
Pin No.	Pin name	I/O	Description
31, 32	NC	—	Not used. (OPEN)
33	V _{ss}	—	Micro computer GND. (0V)
34	DIRC	O	L : 1 Track Jump End, H : 1 Track Jump TZC detect
35	TEST MODE	I	L : Normal, H : Indash Singular test mode
36	SBMN	O	CXD2526 SBMN switch over. H : SUB, L : MAIN
37	WRMN	O	L : DT=RAM Write stop, H : DRAM Write start
38	OPEN LED	O	Turns ON, when ILL ON and PANEL OPEN. H : OFF, L : ON
39	NC	—	Not used. (OPEN)
40	NC	—	Not used. (OPEN)
41	XINT	I	Interruption of CSD2526. Build-up edge detection.
42	NC	—	Not used. (OPEN)
43	NC	—	Not used. (OPEN)
44	MD-POWERON	O	Mechanism deck power terminal. L : OFF, H : ON
45	TABLE-UPDOWN	O	Terminal of the turn table up/down motor.
46	NC	—	Not used. (OPEN)
47	TABLE-R	O	Driver IC control terminal of the turn table drive motor.
48	TABLE-L	O	
49	TABLE-BRAKE	O	Brake terminal of the turn table up/down motor.
50	MUTE	O	Audio MUTE output. L : CANCEL, H : MUTE
51	NC	—	Not used. (OPEN)
52	NC	—	Not used. (OPEN)
53	NC	—	Not used. (OPEN)
54	DEEMP	O	DEEMPHASIS terminal. L : ON, H : OFF
55	XRST	O	2525, 2526 with build up, terminal to reset to digital filter.
56	XLAT	O	LATCH for serial communication to servo IC.
57	NC	—	Not used. (OPEN)
58	ILL ON	O	LED ON/OFF of SOURCE key of NOSE L : LED OFF, H : LED ON
59	KEY-ACTIVE	O	ON/OFF of the key of A/D input. L : Key non-operational, H : Operational
60	$\overline{\text{RESET}}$	I	RESET Terminal of micro computer.
61	SQSY/ATSY	I	SUB Q SYNC Interruption. Go down edge detection (when PIT) AIDP SYNC Interruption. Go down edge detection (when GROOVE)
62	KEYACK/SIRCS	I	KEYACK Terminal, when ILL ON of P126 = L. KEY-ACTIVE of P127 is built up from L to H, as soon as this terminal is built up from L to H by key operation. SIRCS Input terminal of remote control, when ILL ON of P126 = H.
63	TPS/NOSE ON	I	Optical sensor input for detecting turn table rotation. Also for WAKE UP from SLEEP MODE of micro computer dueto NOSE ON.
64	BU-CHECK	I	BACKUP Check terminal. L : No, H : Yes
65	MST	I	Magazine/no magazine detecting terminal. L : Nomagazine, H : Magazine

Pin No.	Pin name	I/O	Description
66	$\overline{\text{BUS-ON}}$	I	Uni-link terminal. L : BUS ACTIVE, H : SLEEP
67	FOK	I	FOCUS OK. L : NG, H : OK
68	V _{DD}	—	Micro computer power supply. (5V)
69	X2	—	Connection terminal for main system clock.
70	X1	—	Connection terminal for main system clock.
71	IC	—	Connection terminal for main system clock.
72	XT2	—	Not used. (OPEN)
73	TABLE- UPDOWN SW	I	Position detection SW input of turn table L : Others, H : Top or bottom limit position.
74	AV _{DD}	—	Analog power supply of A/D converter.
75	AVREF0	—	Reference voltage input of A/D converter.
76	NC	—	Not used. (GND connection, in this device)
77	NC	—	Not used. (GND connection, in this device)
78	INITIALIZE	I	0V : Digital, 5V : Analog
79	NC	—	Not used. (GND connection, in this device)
80	TEMP	I	Mechanism deck temperature detection. HIGH TEMP ERROR processing is executed immediately after dropping below a certain voltage value. HIGH TEMP, when less than 0.5889V. HIGH TEMP cancelled, when more than 0.6349V.

SECTION 6

BLOCK DIAGRAM

6-1. BLOCK DIAGRAM



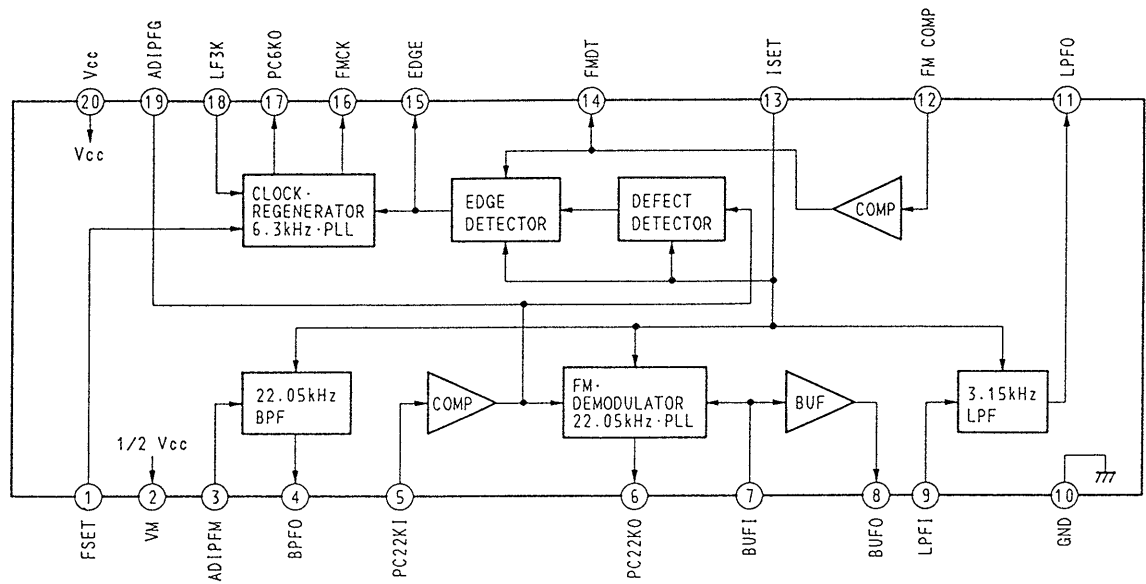
— MAIN SECTION —

The block diagram illustrates the control system for a color television receiver, showing the interconnection of various functional blocks and their pin connections. The central component is the **DATA REGISTER**, which includes an **INPUT SHIFT REGISTER ADDRESS DECODER**, a **SEQUENCER**, and an **OUTPUT DECODER**. The **SEQUENCER** outputs control signals **FS1-4**, **TG1-2**, **TM1-7**, and **PS1-3**. The **OUTPUT DECODER** outputs **FS1-4**, **TG1-2**, **TM1-7**, and **PS1-3**. The **INPUT SHIFT REGISTER ADDRESS DECODER** outputs **FS1-4**, **TG1-2**, **TM1-7**, and **PS1-3**. The **DATA REGISTER** is connected to a **TTL** block (pins 40-43) and a **12L** block (pins 20-23). The **12L** block is connected to a **TTL** block (pins 24-27) and a **12L** block (pins 28-31). The **CLV LPF** (CLV Low Pass Filter) is connected to pins 32-35. The **VCO** (Variable Frequency Oscillator) is connected to pins 36-39. The **LOOP FILTER** is connected to pins 40-43. The **3.5V REGULATOR** is connected to pins 44-47. The **V → I** (Voltage to Current) converter is connected to pins 48-51. The **DATA REGISTER** is connected to a **WINDOW COMPARATOR** (pins 52-55) and a **FOCUS PHASE COMPENSATION** block (pins 56-59). The **WINDOW COMPARATOR** is connected to a **BPF** (Band Pass Filter) (pins 60-63). The **FOCUS PHASE COMPENSATION** block is connected to a **TRACKING PHASE COMPENSATION** block (pins 64-67). The **TRACKING PHASE COMPENSATION** block is connected to a **TM6** (pin 68) and a **TM7** (pin 69). The **TM6** and **TM7** are connected to a **TM4** (pin 70) and a **TM5** (pin 71). The **TM4** and **TM5** are connected to a **TM2** (pin 72) and a **TM3** (pin 73). The **TM2** and **TM3** are connected to a **TM1** (pin 74) and a **TM0** (pin 75). The **TM1** and **TM0** are connected to a **TM8** (pin 76) and a **TM9** (pin 77). The **TM8** and **TM9** are connected to a **TM10** (pin 78) and a **TM11** (pin 79). The **TM10** and **TM11** are connected to a **TM12** (pin 80) and a **TM13** (pin 81). The **TM12** and **TM13** are connected to a **TM14** (pin 82) and a **TM15** (pin 83). The **TM14** and **TM15** are connected to a **TM16** (pin 84) and a **TM17** (pin 85). The **TM16** and **TM17** are connected to a **TM18** (pin 86) and a **TM19** (pin 87). The **TM18** and **TM19** are connected to a **TM20** (pin 88) and a **TM21** (pin 89). The **TM20** and **TM21** are connected to a **TM22** (pin 90) and a **TM23** (pin 91). The **TM22** and **TM23** are connected to a **TM24** (pin 92) and a **TM25** (pin 93). The **TM24** and **TM25** are connected to a **TM26** (pin 94) and a **TM27** (pin 95). The **TM26** and **TM27** are connected to a **TM28** (pin 96) and a **TM29** (pin 97). The **TM28** and **TM29** are connected to a **TM30** (pin 98) and a **TM31** (pin 99). The **TM30** and **TM31** are connected to a **TM32** (pin 100) and a **TM33** (pin 101). The **TM32** and **TM33** are connected to a **TM34** (pin 102) and a **TM35** (pin 103). The **TM34** and **TM35** are connected to a **TM36** (pin 104) and a **TM37** (pin 105). The **TM36** and **TM37** are connected to a **TM38** (pin 106) and a **TM39** (pin 107). The **TM38** and **TM39** are connected to a **TM40** (pin 108) and a **TM41** (pin 109). The **TM40** and **TM41** are connected to a **TM42** (pin 110) and a **TM43** (pin 111). The **TM42** and **TM43** are connected to a **TM44** (pin 112) and a **TM45** (pin 113). The **TM44** and **TM45** are connected to a **TM46** (pin 114) and a **TM47** (pin 115). The **TM46** and **TM47** are connected to a **TM48** (pin 116) and a **TM49** (pin 117). The **TM48** and **TM49** are connected to a **TM50** (pin 118) and a **TM51** (pin 119). The **TM50** and **TM51** are connected to a **TM52** (pin 120) and a **TM53** (pin 121). The **TM52** and **TM53** are connected to a **TM54** (pin 122) and a **TM55** (pin 123). The **TM54** and **TM55** are connected to a **TM56** (pin 124) and a **TM57** (pin 125). The **TM56** and **TM57** are connected to a **TM58** (pin 126) and a **TM59** (pin 127). The **TM58** and **TM59** are connected to a **TM60** (pin 128) and a **TM61** (pin 129). The **TM60** and **TM61** are connected to a **TM62** (pin 130) and a **TM63** (pin 131). The **TM62** and **TM63** are connected to a **TM64** (pin 132) and a **TM65** (pin 133). The **TM64** and **TM65** are connected to a **TM66** (pin 134) and a **TM67** (pin 135). The **TM66** and **TM67** are connected to a **TM68** (pin 136) and a **TM69** (pin 137). The **TM68** and **TM69** are connected to a **TM70** (pin 138) and a **TM71** (pin 139). The **TM70** and **TM71** are connected to a **TM72** (pin 140) and a **TM73** (pin 141). The **TM72** and **TM73** are connected to a **TM74** (pin 142) and a **TM75** (pin 143). The **TM74** and **TM75** are connected to a **TM76** (pin 144) and a **TM77** (pin 145). The **TM76** and **TM77** are connected to a **TM78** (pin 146) and a **TM79** (pin 147). The **TM78** and **TM79** are connected to a **TM80** (pin 148) and a **TM81** (pin 149). The **TM80** and **TM81** are connected to a **TM82** (pin 150) and a **TM83** (pin 151). The **TM82** and **TM83** are connected to a **TM84** (pin 152) and a **TM85** (pin 153). The **TM84** and **TM85** are connected to a **TM86** (pin 154) and a **TM87** (pin 155). The **TM86** and **TM87** are connected to a **TM88** (pin 156) and a **TM89** (pin 157). The **TM88** and **TM89** are connected to a **TM90** (pin 158) and a **TM91** (pin 159). The **TM90** and **TM91** are connected to a **TM92** (pin 160) and a **TM93** (pin 161). The **TM92** and **TM93** are connected to a **TM94** (pin 162) and a **TM95** (pin 163). The **TM94** and **TM95** are connected to a **TM96** (pin 164) and a **TM97** (pin 165). The **TM96** and **TM97** are connected to a **TM98** (pin 166) and a **TM99** (pin 167). The **TM98** and **TM99** are connected to a **TM100** (pin 168) and a **TM101** (pin 169). The **TM100** and **TM101** are connected to a **TM102** (pin 170) and a **TM103** (pin 171). The **TM102** and **TM103** are connected to a **TM104** (pin 172) and a **TM105** (pin 173). The **TM104** and **TM105** are connected to a **TM106** (pin 174) and a **TM107** (pin 175). The **TM106** and **TM107** are connected to a **TM108** (pin 176) and a **TM109** (pin 177). The **TM108** and **TM109** are connected to a **TM110** (pin 178) and a **TM111** (pin 179). The **TM110** and **TM111** are connected to a **TM112** (pin 180) and a **TM113** (pin 181). The **TM112** and **TM113** are connected to a **TM114** (pin 182) and a **TM115** (pin 183). The **TM114** and **TM115** are connected to a **TM116** (pin 184) and a **TM117** (pin 185). The **TM116** and **TM117** are connected to a **TM118** (pin 186) and a **TM119** (pin 187). The

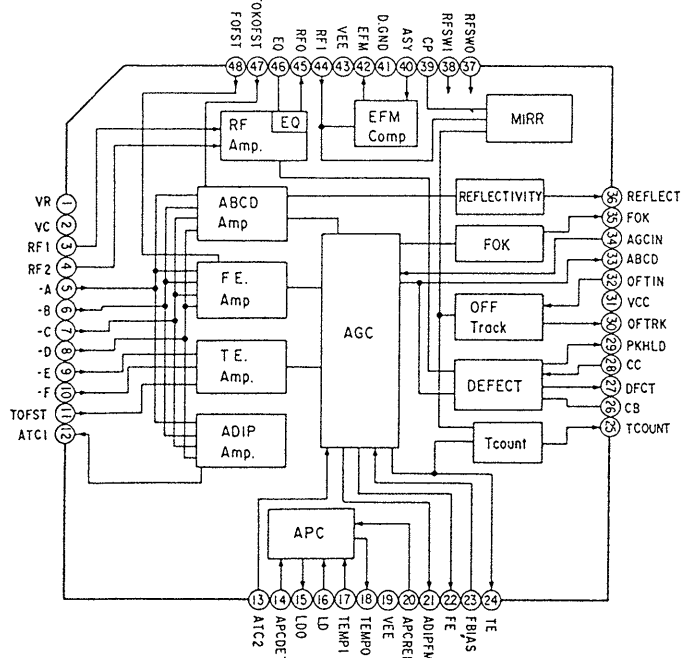
[illegible]

— ROTARY SECTION —

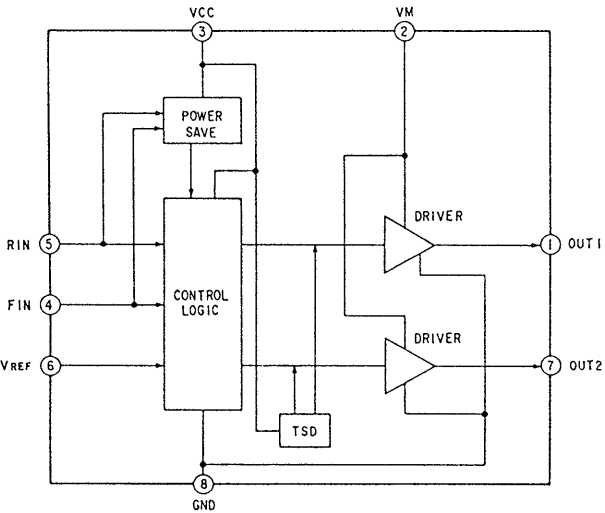
IC501 CXA1380N



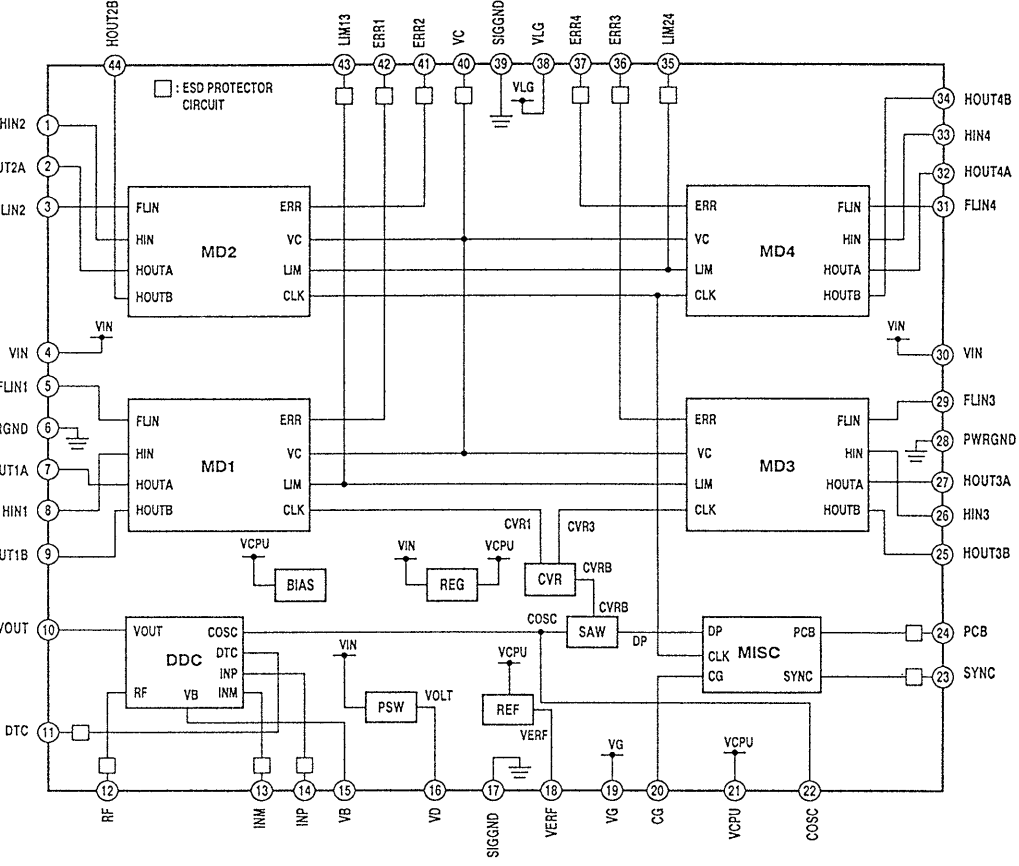
IC504 CXA1381R



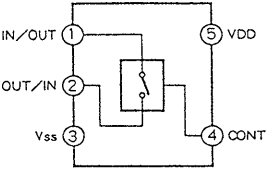
IC508 BA6287F



IC506 MPC1718FU



IC502, 503, 505 TC4S66F



MDX-40

SONY[®] SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

SUPPLEMENT-2

File the Supplement with the Service Manual and Supplement-1.

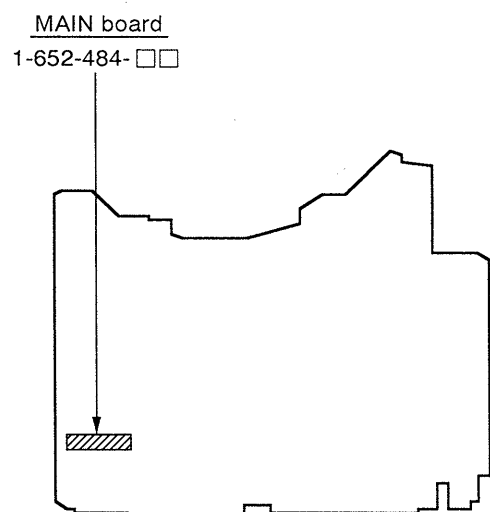
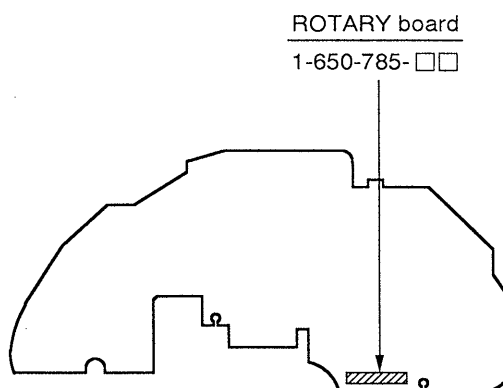
• CHANGE OF BOARD

(ECN-CS402329)

The boards of this model have been changed in the midst of production.

Board	Former Type	New Type
ROTARY board	1-650-785-12	1-650-785-13
MAIN board	1-652-484-12	1-652-484-13
LAMP board	1-652-485-12	DELETE

Accompanying these changes, only the SCHEMATIC DIAGRAM, the PRINTED WIRING BOARDS and the electrical parts list which have been added and changed are described in this SUPPLEMENT. Furthermore, refer to the part code numbers printed on the printed circuit boards to identify the boards.



● EXPLODED VIEWS (Service Manual See page 25 – 28)

Ref. No.	Former Type		New Type		Remark
	Part No.	Description	Part No.	Description	
6	1-652-485-11	LAMP BOARD			Deleted
8	3-907-918-01	CUSHION (STOPPER B)			Deleted
237	3-909-431-01	COLLAR (CENTER)			Deleted

● ACCESSORIES & PACKING MATERIALS (Service Manual See page 36)

Ref. No.	Former Type		New Type		Remark
	Part No.	Description	Part No.	Description	
	1-696-918-11	CORD, CONNECTION	1-769-145-11	CORD, CONNECTION	Changed

● HARDWARE LIST (Service Manual See page 36)

Ref. No.	Former Type		New Type		Remark
	Part No.	Description	Part No.	Description	
#3	7-621-773-86	SCREW +B 2.6X4	7-621-773-95	SCREW +B 2.6X6	Changed
#16	7-621-772-08	SCREW +B 2X3	7-621-255-15	SCREW +B 2X3	Changed
#17			7-621-773-95	SCREW +B 2.6X6	Changed

● ELECTRICAL PARTS LIST

MAIN (Service Manual See page 30 – 34, Supplement-1 See page 38)

Ref. No.	Former Type		New Type		Remark
	Part No.	Description	Part No.	Description	
CNP312	1-764-376-31	CONNECTOR 6P			Deleted
IC309	8-759-940-45	IC S-8054HN-CB	8-759-097-36	IC RH5VA40AA	Changed
IC310	8-759-284-89	IC μ PD78056YGC-W15-3B9	8-759-327-38	IC μ PD78056GC-049-3B9	Changed
PL301			1-517-181-31	LAMP, PILOT	Added
R358	1-216-669-11	METAL CHIP 5.6K	1-208-800-11	METAL CHIP 5.6K 0.5% 1/10W	Changed

ROTARY (Service Manual See page 34, 35, Supplement-1 See page 38)

Ref. No.	Former Type		New Type		Remark
	Part No.	Description	Part No.	Description	
C538			1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	Added

LAMP (Service Manual See page 30)

Ref. No.	Former Type		New Type		Remark
	Part No.	Description	Part No.	Description	
	1-652-485-11	LAMP BOARD			Deleted
CNP312	1-764-377-31	CONNECTOR 6P			Deleted
PL301	1-517-181-31	LAMP, PILOT (OPEN LED)			Deleted

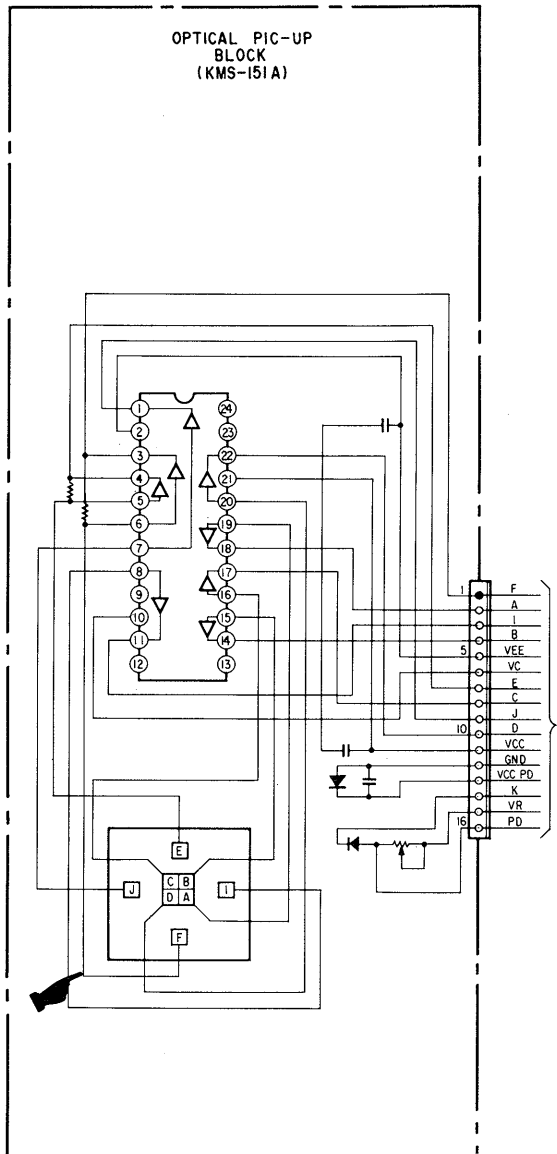
1. DIAGRAMS

➡ : Added portion

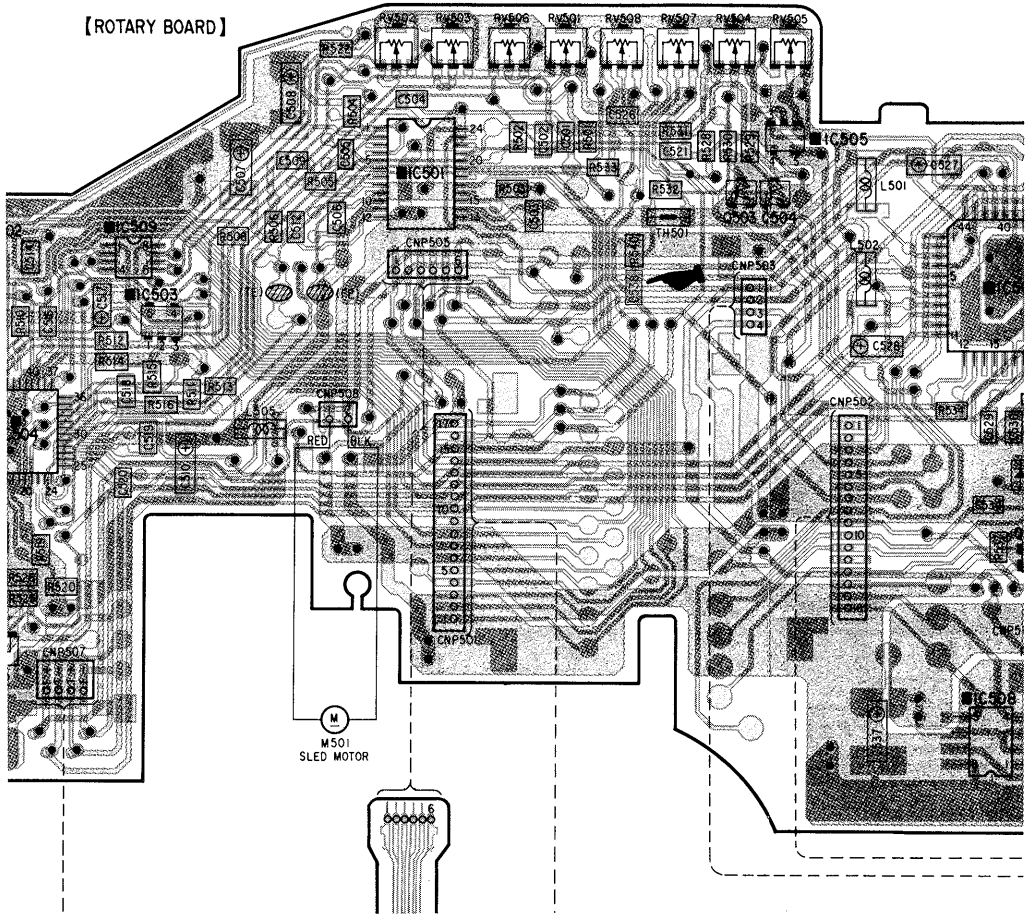
1-1. PRINTED WIRING BOARDS – ROTARY SECTION – (1-650-785-13)

(Service Manual See page 8 – 10)

(Location B – H, 1 – 4)



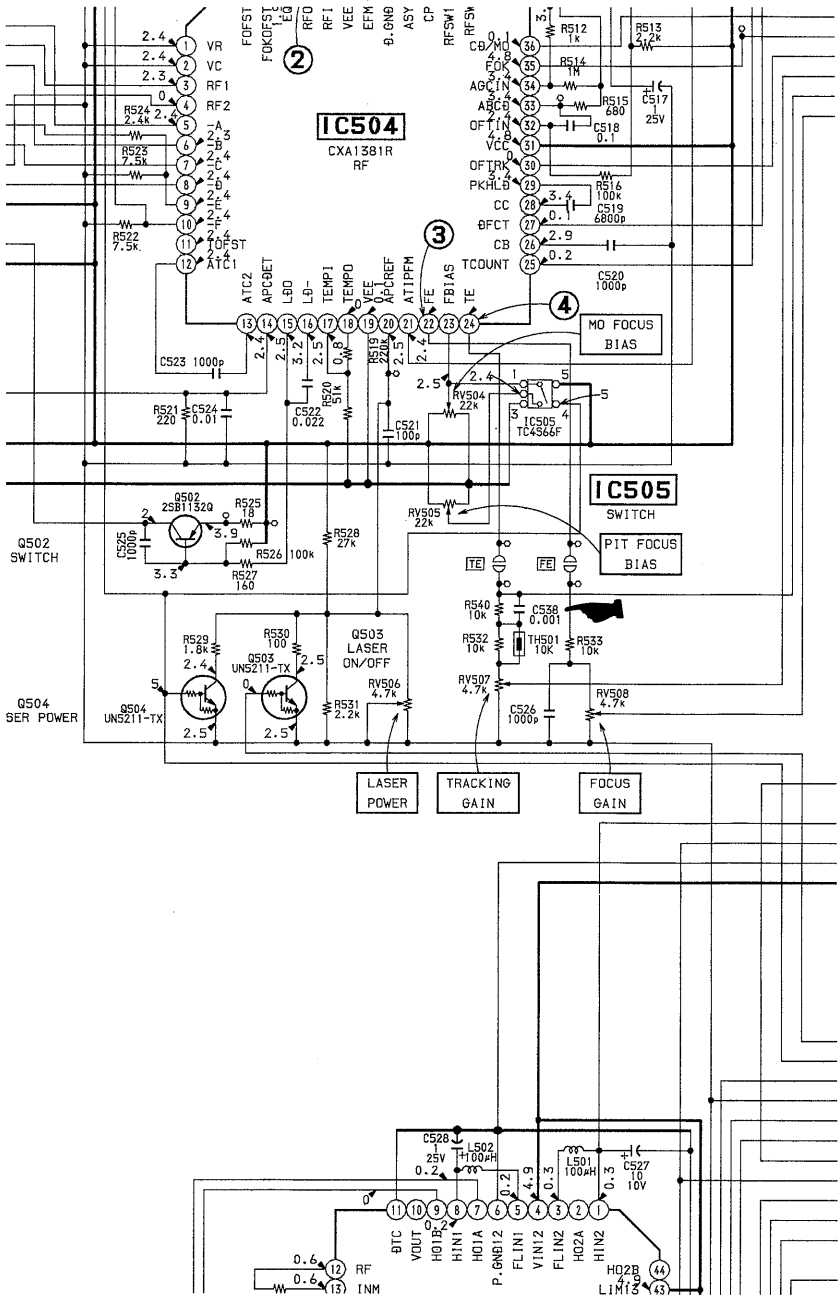
(Location A – F, 7 – 13)



1-2. SCHEMATIC DIAGRAM – ROTARY SECTION – (1-650-785-13)

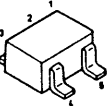
(Service Manual See page 11 – 13)

(Location E – M, 7 – 12)

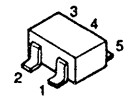


● SEMICONDUCTOR LEAD LAYOUTS

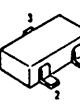
TC4S66F



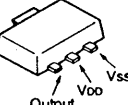
YN1A312-TX



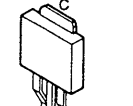
RB411D



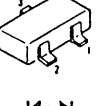
S-8054HN-C8



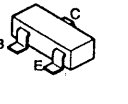
2SB1203FAS



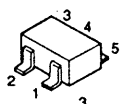
DAP202K



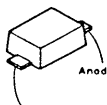
DTC144EK
DTC314TKH04
DTD113EK
2SC1623-L5L6



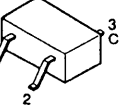
FMY1



MA8091-M
MA8110-L-TX



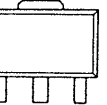
UN5113
UN5211



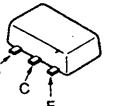
DTZ5.6B
MA8062-M
1SS352
1SS355



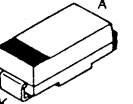
RB110C



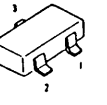
2SB1115A
2SD1622-S
2SD1760F5-R



EC10DS2



DAN202K



● SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D1	I - 36	IC317	I - 15
D2	I - 36		
D3	H - 36		
D4	H - 36	PH301	G - 34
D5	B - 36		
D303	G - 24	Q101	E - 20
D304	G - 24	Q201	D - 20
D305	G - 24	Q301	D - 17
D308	G - 23	Q302	G - 24
D309	H - 23	Q304	I - 21
D310	K - 19	Q305	I - 20
D312	H - 22	Q306	J - 21
D314	C - 21	Q307	C - 22
D317	D - 21	Q309	C - 22
D318	E - 20	Q312	A - 23
D319	E - 23	Q314	D - 22
D320	G - 24	Q315	G - 23
D321	H - 24	Q316	C - 21
D324	K - 24	Q317	D - 21
D325	C - 18	Q318	E - 21
D326	K - 16	Q320	E - 23
D328	D - 17	Q322	D - 23
		Q323	H - 23
		Q324	H - 23
		Q325	J - 16
IC101	E - 19		
IC201	D - 19		
IC301	E - 17	Q326	G - 20
IC302	E - 15	Q330	K - 24
IC303	E - 16	Q331	K - 25
		Q332	K - 19
		Q400	K - 16
IC304	F - 14		
IC305	F - 15		
IC306	F - 17	Q401	J - 16
IC307	G - 17	Q402	J - 15
IC308	G - 24	Q403	J - 14
		Q404	J - 14
		Q405	K - 14
IC309	H - 24		
IC310	J - 18		
IC311	I - 22	Q406	J - 15
IC314	E - 22	Q407	J - 15
IC315	H - 15	Q408	K - 16

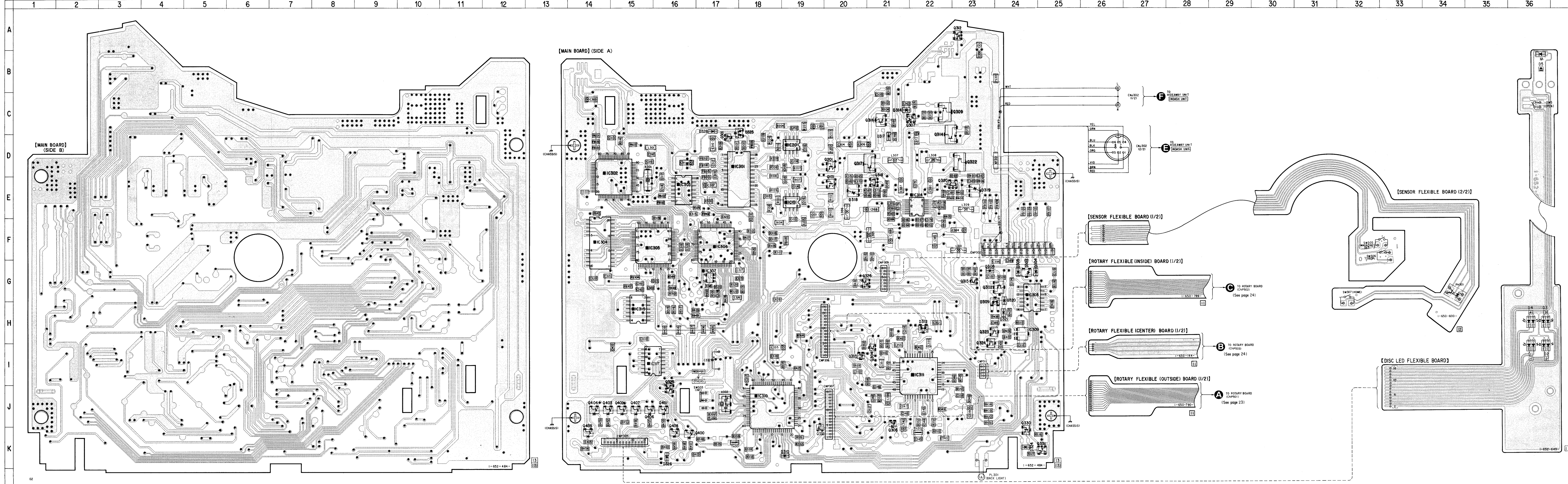
Note:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : Through hole.
- ⋯ : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated)

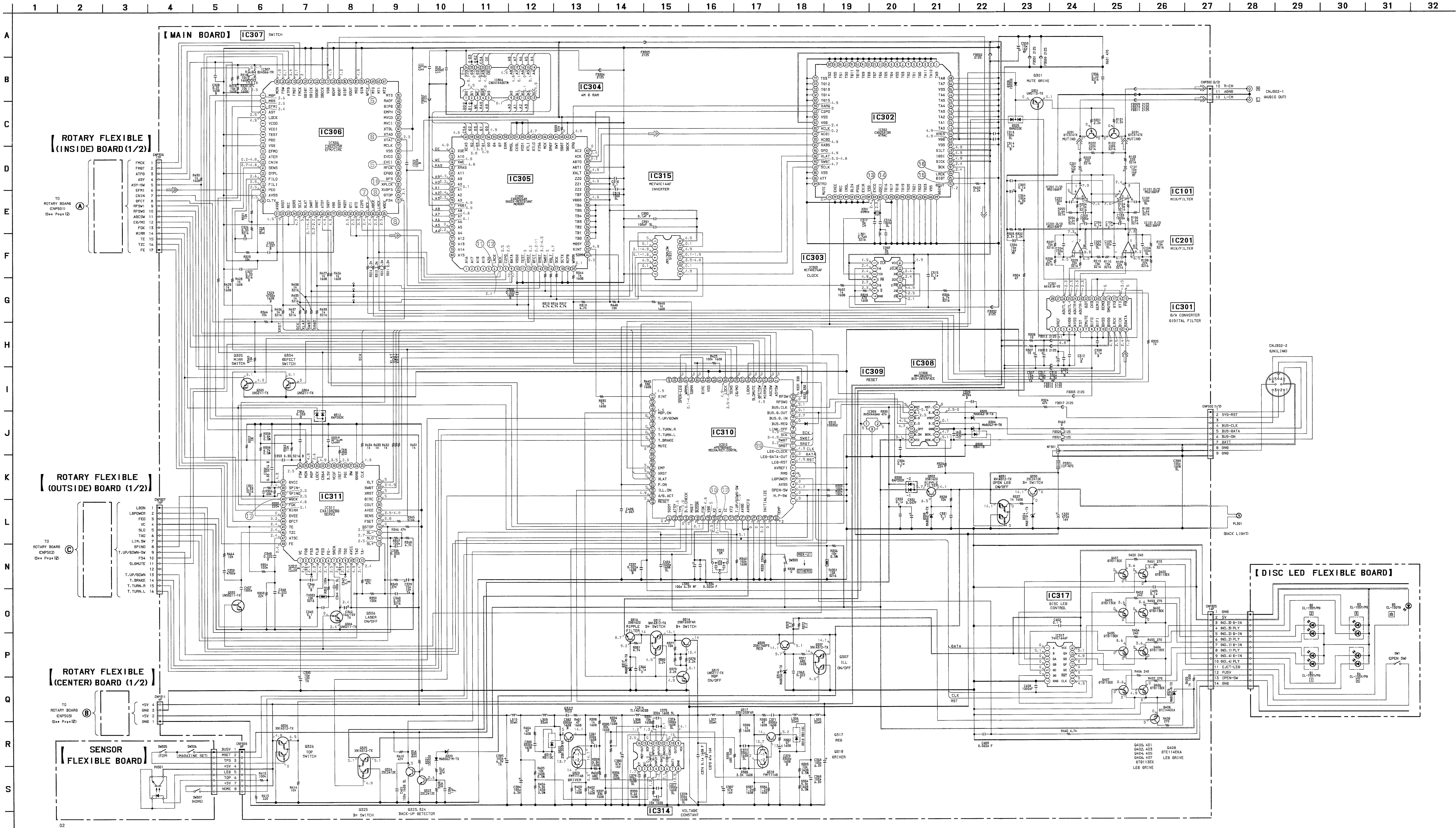
Caution :

Pattern face side : Parts on the pattern face side seen from
(Conductor Side) the pattern face are indicated.
Parts face side : Parts on the parts face side seen from the
(Component side) parts face are indicated.

1-3. PRINTED WIRING BOARDS - MAIN SECTION - (1-652-484-13) ● Refer to page 5 for Semiconductor Lead Layouts.



1-4. SCHEMATIC DIAGRAM — MAIN SECTION — (1-652-484-13)



Note :

- All capacitors are in μ F unless otherwise noted, pF; μ F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.
- --- : B+ Line
- --- : adjustment for repair.
- Power voltage is dc14.4V and led with regulated dc power supply master unit is power voltage jack.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : MD (PLAY)
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- \Rightarrow : MINI DISC

9-959-446-12
(Including 9-959-446-85
with 9-959-446-81
9-959-446-84)

Sony Corporation
Mobile Electronics Company

— 84 —

English
96A02025-1 (2)
Printed in Japan
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Published by Home A&V Products Div.
Quality Engineering Dept.

MDX-40

SONY

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

CORRECTION - 1

Fill this Correction with the Service Manual.

Subject :

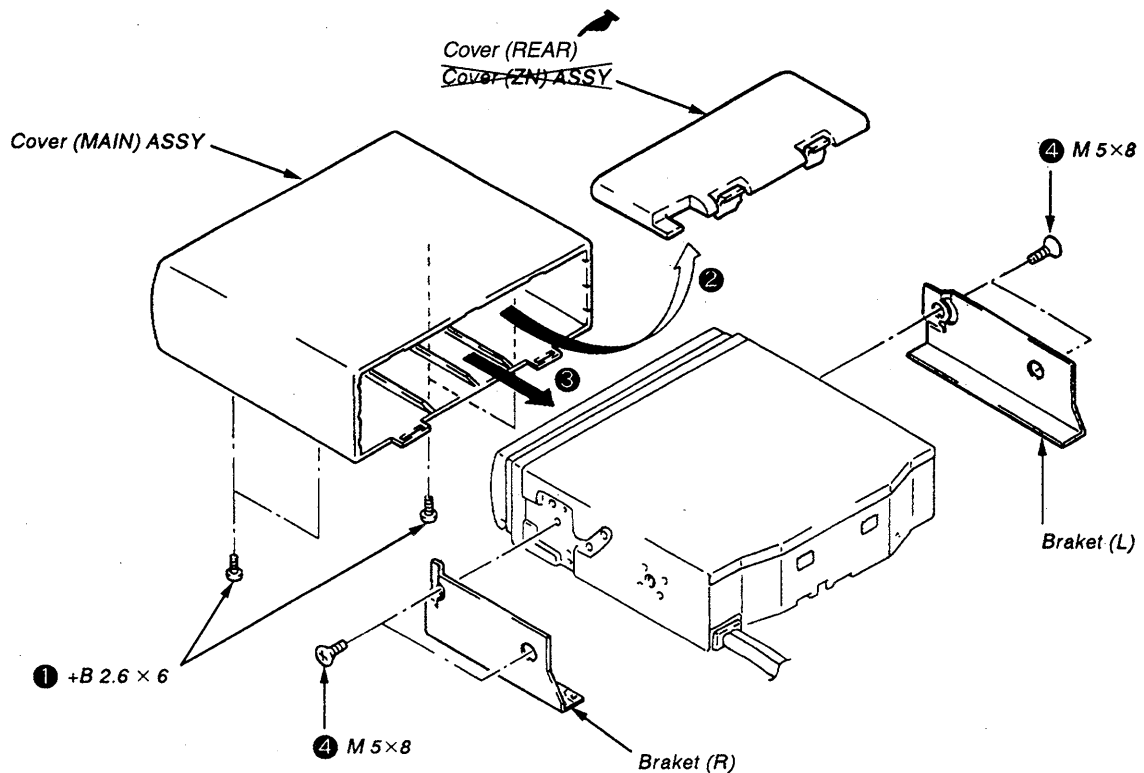
1. DISASSEMBLY
2. EXPLODED VIEWS

(RPC-97014)

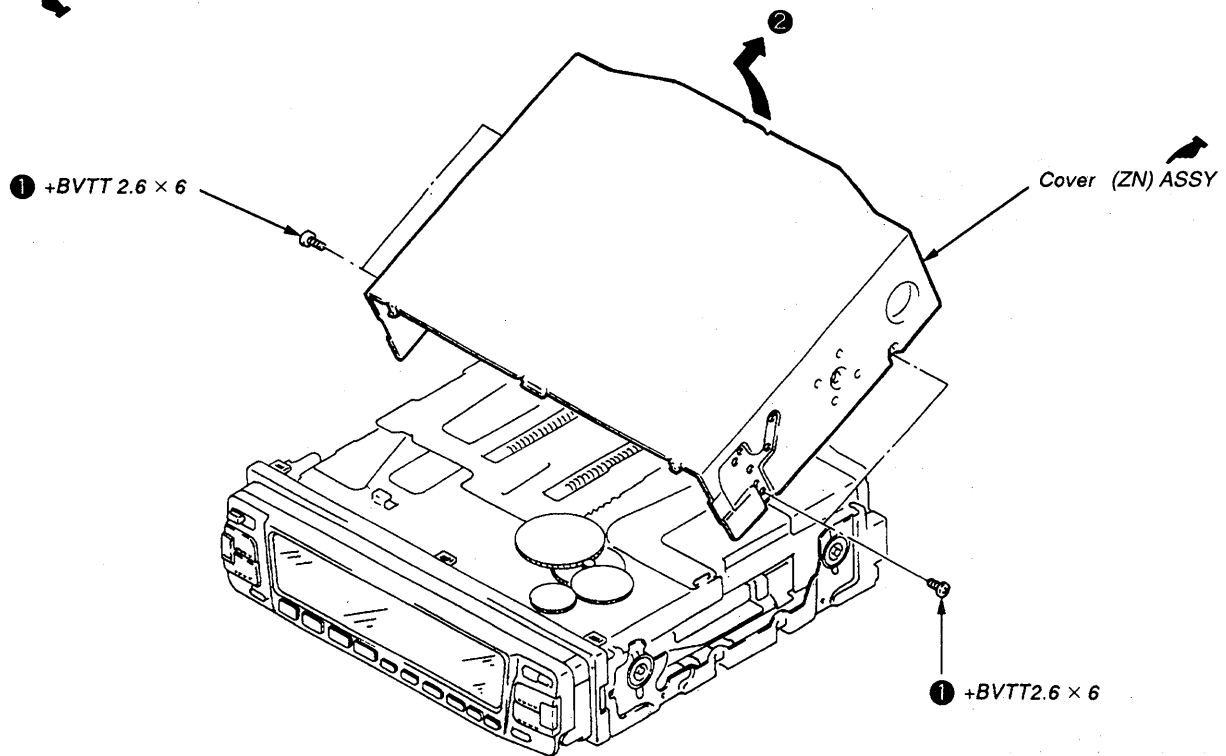
 : Changed portion

1. DISASSEMBLY (Supplement-1 see page 2)

1-1. COVER (MAIN), BRACKET L/R



1-2. COVER (ZN) ASSY



2. EXPLODED VIEWS (Service Manual see page 25 and Supplement-1 see page 36)

